# Field Procedures Manual: Access-Point Angler Intercept Survey 

# Atlantic Coastal Cooperative Statistics Program <br> SEDAR65-RD017 

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## Field Procedures Manual:

## Access-Point Angler Intercept Survey

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## 1. I NTRODUCTI ON TO APAIS

## Program Background

National Oceanic and Atmospheric Administration (NOAA) Fisheries conducts a survey of marine recreational anglers to obtain information about their fishing effort, catch, and participation in marine recreational fishing, and about the demographic, social, and economic characteristics of those who participate in saltwater recreational fishing in United States waters. These data for marine recreational fisheries had been collected through the Marine Recreational Fisheries Statistics Survey (MRFSS) from 1979 until 2008; wherein, it was replaced by the Marine Recreational Information Program (MRIP). The MRIP was created in order to continue improving the collection, analysis, and use of fishing data.

Accurate, up-to-date catch, effort, and participation statistics are fundamental for assessing the influence of fishing on any stock of fish. The quantities taken, fishing effort, and seasonal and geographical distribution of the catch and effort are required for the development of rational management policies and plans. Continuous monitoring of catch, effort, and participation is needed to monitor trends, to evaluate the impacts of management regulations, and to project what impacts various management scenarios will have on a fishery. Recreational fisheries data are essential for NOAA Fisheries, the Regional Fishery Management Councils, the Interstate Fisheries Commissions, state conservation agencies, recreational fishing industries, and others involved in the management and productivity of marine fisheries.

## Access-Point Angler I ntercept Survey

The Access-Point Angler Intercept Survey (APAIS) is conducted at public marine fishing access points (i.e., boat ramps, piers, beaches, jetties, bridges, marinas, etc.) to collect individual catch data, including species identification, total number of each species, length and weight measurements of individual fishes, as well as angler-specific information about the fishing trip and the anglers' fishing behavior. This field intercept survey is conducted by each of the 13 Atlantic states extending from Maine to Georgia.

The APAIS project staff includes the following roles:

- Field Interviewers (FIs)
- state coordinator and State Agency personnel
- The ACCSP's Recreational Data Team
- NOAA Fisheries MRIP personnel

Field Interviewers work directly with their state coordinator. Coordinators are involved in interviewer training, supervision, and quality control procedures; assignment scheduling and tracking sampling progress; and updating the site description files using the site information provided by FIs. In addition, FIs should call their state coordinator when questions about procedures, fish identification, or interviewing at a site should arise.

The chart in Figure 1.1 illustrates the data collection management structure for the project.

Figure 1.1: APAI S Data Collection Management Structure


## Complementary Surveys

The Marine Recreational Information Program (MRIP) is the updated version of a research program (Marine Recreational Fisheries Statistics Survey or MRFSS) developed in the late 1970s to provide a database of marine recreational fishing activity. The MRIP consists of several independent, yet complementary surveys:

- The APAIS, which is an intercept survey designed to assess catch per unit effort in all fishing modes;
- The Fishing Effort Survey (FES), a mail based survey which estimates recreational shore and private boat fishing effort by utilizing the U.S. Postal Service's (USPS) list of residential addresses and the list of mailing addresses provided by licensed or registered anglers, derived from the MRIP National Saltwater Angler Registry (NSAR).
- The For-Hire Survey (FHS), which is designed to assess for-hire charter and headboat fishing effort;
- The Large Pelagic Survey (LPS), which collects information on pelagic fishes; and
- The Highly Migratory Species (HMS) census card program, which collects information about migratory species of fish.


## Survey Definitions

The below definitions represent some of the most common vocabulary used within the APAIS. A more comprehensive list of survey vocabulary can be found in Appendix E.

## Field I nterviewer (FI)

The key to accurate data collection begins with the Field Interviewer (FI). FIs are responsible for accurate fish identification to the species level, accurately measuring and weighing an array of fish species, meticulously following survey procedures, neatly and accurately completing survey forms, and handling face-to-face interactions in the field.

FIs should never claim to be an employee of NOAA Fisheries. Instead, FIs should say that they are an employee of their respective state agency collecting data for a survey sponsored by NOAA Fisheries.

## State Coordinator

All 13 Atlantic states will have a state coordinator who is responsible for all aspects of the administration of the APAIS field data collections, including supplemental interview training for new employees (beyond the ACCSP's initial training session), supervision of FIs, and quality control (QC) procedures. These QC procedures include assignment scheduling, tracking sampling progress, and updating site description files on the Site Register from the notes of FIs in the field. The state coordinator should be contacted if FIs have any questions about procedures, fish identification, or interviewing site specifics. For additional details about required tasks of the state coordinator, see After Assignment: Administrative Tasks on p. 82 .

## Waves

A Wave is a two-month sampling period:
Wave 1 = January and February
Wave 2 = March and April
Wave 3 = May and J une
Wave 4 = July and August
Wave $5=$ September and October
Wave $6=$ November and December

## Fishing Modes

The APAIS is structured around types or "modes" of fishing. There are four major types of fishing: shore fishing (SH), which includes beach/bank (BB) and man-made (MM); private/rental boat fishing (PR); charter boat fishing (CH); and headboat fishing (HB). More exact definitions for fishing modes are:

## Shore Fishing (SH)

## Beach/ Bank (BB)

o Bank
A bank is a stretch of rising land at the edge of a body of water not washed by high water, which could be rocks or an overhanging cliff.
o Beach
A beach is a stretch of pebbles or sand beside a body of water, often washed by high water.
o Breachway
A natural or man-made inlet that cuts through a barrier island or beach.

## Man-Made (MM)

o Bridge - A structure spanning and providing passage over water.
o Breakwater - A barrier or offshore structure that protects a harbor or shore from the full impacts of Waves.
o Causeway - A causeway is an elevated or raised way across wet ground or water.
o Dock - A structure built out over water and supported by pillars/anchors, with longterm docking facilities for boats.
o Jetty - A kind of wall, usually made of rocks, built out into the water to restrain currents or protect a harbor.
o Pier - A structure built out over water and supported by pillars, without long-term docking facilities for boats.

## Private / Rental Boat (PR)

o Private Boat
A boat belonging to an individual.
o Rental Boat
A boat that is rented or leased. No captain or crew is provided; the renter operates the boat.

## Charter Boats (CH)

A boat operated by a licensed captain and crew where the anglers are part of a pre-formed group that has paid a fee for the captain's services for a specific date and time. The number of anglers in the pre-formed group is usually less than seven. Charter vessels are subject to the requirements of the U.S. Coast Guard to carry six or fewer passengers for hire and that engages in charter fishing at any time during the calendar year. The key is that these trips are private, and individual anglers do not just show up to join the trip. Charters, sometimes called guide boats, are usually closed parties, as opposed to the open party status of headboats. Charter boats can engage in a full range of fishing techniques, including trolling, bottom fishing, and drift fishing. Charter boats may make all-day or half-day trips.

## Headboats (HB)

A boat operated by a licensed captain and crew where individuals or small groups of anglers pay a fee for fishing and holds a valid Certificate of Inspection (COI) issued by the U.S. Coast Guard to carry more than six passengers for hire. The anglers usually do not know everyone on the boat, and a minimum number of anglers are required prior to launch. In this case, any angler can reserve a space, or show up on the day of the trip to join. The vessel is operated by a licensed captain (guide or skipper) and crew, and almost always carries seven or more passengers, some vessels over 100. In some areas of the country, headboats are called "open party boats" or "party boats" for short.

## Fishing Sites

Since this survey focuses on saltwater recreational fin-fishing, all sites are discrete geographical areas from which this activity takes place. One interviewer should be able to see the entire site from one vantage point in order to count anglers and cover the entire site on foot in a reasonable time. Some beach/bank sites can be larger than 100 yards, but boundaries should be clearly identified in the Site Register.
More than one mode of fishing can be present at a single fishing site. For instance, a docking area can have both charter and private boats present at one site. Additionally, if people occasionally fish from the dock itself, the Site Register will show shore fishing activity for that site.

## 2. APAIS PROCEDURES

## Survey Tasks and Components

## Site Register

The Site Register (SR) is a database of all access sites along the Atlantic and Gulf Coasts of the United States from which saltwater recreational fin-fishing may occur. The sampling frame for the APAIS is derived from this database. Information provided for each site in the SR includes site descriptors, site location, and recreational fishing activity information by fishing mode (fishing from shore, private or rental boat fishing, charter boat fishing, or headboat fishing). Sites with headboat fishing activity are listed in the SR, including headboat only sites, but do not have headboat mode-specific activity pressures included. The SR is not used as the sample frame for headboat sampling. The SR database is maintained at NOAA Fisheries and is accessed by private or public guest account on the website: https://www.st.nmfs.noaa.gov/siteregister/html/siteRegister.jsp (or by searching for "MRIP Site Register" in any online search engine).

This web portal allows for editing of all site information, retiring closed sites, and addition of new sites. Additionally, this site allows state coordinators to navigate to the online vessel directory tool.

## Sample Frame

Sites are grouped together with similar pressure characteristics in close geographic locations in order to create sampling clusters of up to two sites per cluster. Only one cluster is sampled per assignment. The APAIS sampling frame is all possible combinations of the site cluster, the kind of day (weekday or weekend), and one of five defined time intervals.

## Site Assignments

Site assignments are composed of a cluster of sites at a pre-determined date and time of sampling, and includes all site-based modes of eligible fishing (headboat mode is done separately). Site assignments are drawn from the sample frame using weighted random selection (site fishing pressures) within several logistical constraints (e.g., excluded dates and state sub-regions). All drawn assignments are to be completed on the selected date/time interval.

## Assignment Schedules

Monthly site assignment draws are provided to the state coordinators for scheduling of field interviewers to complete. Site assignments consist of date, a time interval (2:00AM8:00AM, 8:00AM-2:00PM, 2:00PM-8:00PM, 8:00PM-2:00AM, 11:00AM-5:00PM), and a cluster of fishing sites with activity.

Site assignments are non-replaceable; meaning, they cannot be rescheduled for any reason. Cancellation of an assignment should be minimized. The interviewer should pay close attention to the weather in his/her area and call his/her state coordinator prior to the assignment time if there is likelihood that the weather will be severe enough to warrant cancelling the assignment. Thunderstorms may be severe and restrict travel/access during the storm, but these are typically brief relative to the 6 -hour interval so the FI should shelter appropriately, then continue to complete the assignment, rather than cancel an entire sampling assignment.

## Site Assignment Tasks

Upon arriving at the site, interviewers should first check in with the person in charge (or the person previously contacted) if available. Both for permission and as a courtesy, the interviewer should introduce him or herself and give a summary of the purpose of the survey. Clustered sites must be visited in the order in which they are assigned for the time intervals assigned. Interviewers should set up at the appropriate location to intercept all eligible anglers at that site. Interviewers should also be aware of the fishing modes that will be available based on pre-assignment review of the Site Register for assigned site(s) attributes \& pressures.

In addition to conducting interviews with eligible anglers, the APAIS includes counting all anglers that exit the site (i.e., completed their fishing) during the sampling period at each site visited. At all times, regardless of the intensity of fishing activity, FIs are required to obtain as many interviews as possible while simultaneously counting anglers. Counted anglers include anglers who are "missed" when an FI is busy conducting interviews with other anglers (see Interviewing and Counting Anglers on p.22).

Interviewers are only allowed to perform an incomplete trip interview for beach/bank anglers. The incomplete-trip interview requires the additional question about expected time to continue fishing and has restrictions on when interviews may be obtained.

Interviewers shall also perform an onsite review of Site Register information including, but not limited to, the location, directions, and site pressures. They should take notes on any changes to be made to the Site Register information. Changes are submitted to the state coordinator for entering in the Site Register.

## Headboat I ntercept Assignment

Angler intercepts in the Headboat mode are conducted onboard the boats, during the fishing trip, including enumeration, identification, and measuring discarded (live or dead) fish, and are assigned by boat-day rather than site-day. Assignments are drawn for the forhire vessel itself, pulled from the directory of active, eligible boats. The sampling pool for each month and state consists of all possible (eligible) boat/day combinations, using a weighted systematic draw similar to the site-day process. HB assignments may be rescheduled. If a boat cannot be sampled on the date assigned in the sample draw, then a new date for sampling that boat should be scheduled within the same month and kind of day (weekend or weekday). It is important to note that the highest control numbers in both weekend and weekday can be marked as "Reserve", meaning the lower control numbers should be completed first, even if this means moving the drawn vessel to an earlier date than it was scheduled.

Two interviewers shall be assigned to HB at sea sampling assignments in order to maximize the amount of data collected (angler interviews and discarded fish information). The same interview is performed as during site assignments, but includes observing, identifying, and measuring discarded fish in addition to harvested fish. Observation of discarded catch is focused on a fixed sub-group of anglers. Interviewers should ask anglers preliminary (any question that can be filled out prior to the conclusion of fishing activity) and angler-specific questions on the Intercept Form on the way to the fishing grounds, then monitor harvested and discarded catch during fishing activity, and finally fill in questions concerning fishing time and landed catch questions once fishing is complete and the boat is returning to the dock.

## FHS validation Checks

The FHS dockside validation requires that FIs visit the access sites of a subset of vessels which were selected for the FHS in order to record whether the vessel is docked or away. These in/out of dock checks can to be performed before, during, or after an assignment interval or upon scheduling by the state coordinator. However, it is important to note that interviewing takes precedence over FHS dockside validations. Also, FHS validations and interviews can never be recorded from the same vessel on the same day. Site information and/or vessel directory information should be obtained, as needed, during these site visits, similar to those tasks completed during intercept assignments.

## FHS Vessel Directory Updates

The FHS Vessel Directory is continuously updated during the survey year for charter boats and headboats. APAIS interviewers submit information on new vessels in the fleet and provide missing information for vessels currently in the directory if it can be obtained during routine intercept survey assignments. The FHS Vessel Directory is the source of up-to-date information for headboat assignments and supports the sampling frame for the weekly FHS Telephone Survey and the FHS dockside validation checks. Updates are submitted through the online Vessel Directory.

## Assignment Completion and Tracking

Upon receipt of the assignment schedule, state coordinators should utilize the site-based assignment draw, headboat assignment draw, and FHS validation information via the ACCSP website. Through this application, state coordinators should provide weekly updates on assignment completion and numbers of interviews obtained.

## 3. NOAA FISHERIES SITE REGISTER

The Site Register is an online database of all saltwater recreational fin-fishing locations in each state. This database is managed by NOAA Fisheries, but requires the APAIS project to provide input to keep the information accurate and up to date. For each site, the Site Register includes a site information sheet, a site map, and an estimate of the monthly weekday and weekend fishing pressure by fishing mode.

Once accessed, FIs for the APAIS will click on "Guest Login" at the login page.
noaA home weather oceans fisheries charting satelutes climate research coasts careers
NOAA



The site register website also includes the Vessel Directory. See section 6 (For-Hire Survey tasks) for more information on vessel records.

Once on the NOAA MRIP site, FIs will see a screen that asks for site information on the left side and presents a map on the right side of the screen. For assistance, FIs can select the "Help" button in the upper left-hand side of the screen. This will show a dropdown list in which "User Guide" can be selected and downloaded. FIs should select the state in which the assignment was assigned along with the "Site ID" that is assigned by their state coordinator. Just those two pieces of information are needed to see information for the work assignment.


In the example below we are looking for site 3339 in the state of Delaware. Once that information is entered FIs can hit 'Search' and the screen should change to look like this:

"Lewes DNREC Boat Ramp" is displayed in the 'Site Name" section. Clicking on the 'View' box just right of this provides three additional sets of site details.

Once 'View' is selected, important site information for the site will be displayed in the "Site" tab on the right side as shown below. Notice the Site ID, Site Name, Status (should be Active), state, county, address, and contact information. This should be helpful in regards to finding the location of the site. The Site Register includes information to help ensure FIs are at the correct location and the safety of the site upon arrival. Information, such as lighting at the site, whether an FI can interview at the site, and the number of parking spaces should be helpful during preparations to go out into the field.


Under the "Pressure" tab, the fishing pressures, which are the site-specific average number of anglers expected to use that site in the selected fishing mode during given 6-hour time intervals on an average day, can be found. Pressures are listed as categorical values and must be representative of the average daily activity over the entire month. Separate pressure ratings are given for weekdays and weekend time intervals in each fishing mode for each month of the year. Pressures are used to determine sampling probabilities for each site and are updated each Wave. Pressure categories are:

| Pressure Code | Average Number of Eligible Anglers |
| :---: | :---: |
| 0 | $1-4$ |
| 1 | $5-8$ |
| 2 | $9-12$ |
| 3 | $13-19$ |
| 4 | $20-29$ |
| 5 | $30-49$ |
| 6 | $50-79$ |
| 7 | $80+$ |
| 8 | Can't determine |
| 9 | Anglers/fishing modes not present |

## Determining Site Pressure

The Site Register displays the site pressures for each fishing mode by month, day type, and time period for the selected site. It will be the FIs responsibility to report any discrepancies between the Site Register and the on-site observations to the state coordinator at the end of an FI's assignment, along with the weekly summary of activity. Due to the Site Register being updated before every Wave, it is important that FIs make sure to use up-to-date Site Register information.

As an example, if an FI is visiting the Lewes DNREC Boat Ramp on a weekend day during the month of June between 1400 and 2000 and 20 people are observed fishing, FIs will want to ask around to determine if this a normal scene or if this was an out of the ordinary situation that would most likely not repeat itself (like a fishing tournament). It is important to keep in mind that, for the purposes of quantifying site pressure, these observed anglers must be exiting/ending their fishing trip within the assignment time. That is, angler fishing activity from shore (who are not finished) or parked trailers, which may imply fishing on boats, should not be used to determine site pressure. If an FI finds that it's a normal scenario, it should be reported to the state coordinator so they can update the pressure at that site.


Clicking on the "Map" tab will show different ways to view sites. Sites can be viewed by google map or by google satellite. The important thing to note is the drop pin which represents the site location. Use the zoom option at the top left side of the map to see the precise location.


Zoom in to see detail such as street names. If using the satellite option the parking lot, buildings, and layout of the marina should be visible. This will be invaluable when going to new sites or when questions come up in regards to locations.


## Editing Site I nformation

States will be responsible for updating site information regarding fishing pressure for each site in their state before each Wave and shall also ensure that every site is physically inspected at least once per year in order to update the Site Register, regardless of whether or not the site was assigned for interviewing. Each state is encouraged to provide field staff, the de facto source of site information, with a preferred method of reporting aforementioned site details. Although the pressure estimation time period is done per Wave and the survey's data are used to produce estimates of catch rates by Wave, the sampling of assignments is done by individual month. Because of this, state coordinators must submit site information intended to be used for a given month by the $1^{\text {st }}$ of the month prior to the sample month (e.g., before February $1^{\text {st }}$ to be included in March site assignments).

Sites are never removed from the Site Register. Instead, they are simply retired if they are observed to be closed permanently. Retired sites (having no fishing activity in any mode on any given month) are maintained within the Site Register but are ineligible for future draws of sampling sites. These are kept in case of the future reopening of the site and in order to maintain unique codes for sites. When new sites are created, FIs and state coordinators should provide the best estimate of fishing pressure. If possible, site personnel should be asked for this information, in an attempt to include monthly pressure estimates for the remainder of the year.

Sites with multiple modes of fishing should not be split into multiple sites for the sole purpose of separating fishing modes into geographic locations. However, if intercepting shore mode anglers and boat mode anglers from a single vantage point becomes impossible, the site can be split by mode. That is, if a site is too large, with multiple points of access so that anglers cannot be counted from a single vantage point, or all anglers cannot be intercepted without missing observations of activity at another access point,
splitting the site may be necessary. If a site is split, the resulting sites must be submitted as two new sites and the previous site retired.

Most sites within the Site Register are considered public (Private Access? = No). Private ownership of a site (e.g., marina, launch, pier, park, etc.) does not mean that this is a private site. Typically, FIs do not have access to true private access sites; however, a site being privately owned should not affect the ability of interviewers to interview at a site. While true private access sites do not typically allow FIs on site, some do for state agency staff.

For questions concerning troubleshooting the Site Register, or general FAQs, there is a "Help" option located at the top left of the Site Register website.

## Pre-Assignment Use

It is imperative to review the Site Register several days prior to going out into the field. Do not look for a site the night before or the morning of the assignment. If there are issues with the information on the site or if the Site Register is not working, it may not be possible to find the assignment site. FIs should review all this information no less than 3 days before their assignment in order to assure their timing and location for the assignment. Prior to location assignments, FIs should also be aware that there can be no cancellations (barring extreme circumstances) for site-based assignments. Therefore, FIs should let their supervisors know about possible scheduling conflicts as early as possible.

## 4. APAIS ASSI GNMENT

## Pre-Arrival Tasks

As mentioned in the previous section, FIs should be sure of their directions to the assignment as well as the time they will need to conduct interviews/counts amongst anglers. FIs should contact their state coordinator if there are problems locating sites or their associated pressures.

## Supplies:

It is the responsibility of the FI to review the lists of required equipment/supplies prior to each assignment and to request additional equipment/supplies when necessary.

The following materials shall also be available to complete assignments:

- Assignment Summary forms
- Intercept forms
- Extra Fish forms
- Discard forms
- Dockside Validation forms
- "To Whom" letters
- Privacy Act letters
- Site Register information
- Vessel Goodlist for current Wave (in APAIS Assignment Tracking Application(ATA))
- A fish identification field guide
- Chatillon Scales ( 12.5 kg and 2.0 kg )
- Measuring board
- Tape measure
- Blue/black pen and pencil
- Name badge or other identification
- Coding Manual

In addition to the items listed above, there are certain items that may not be provided by each state. If in doubt, please check with the state coordinator. These include:

- A legal-size clipboard;
- Plastic bags to protect scales when they are not in use;
- A towel for wiping hands between fish handling and form handling;
- A plastic bucket; and
- A timepiece (watch, cellphone, etc.), however this is not provided by the ACCSP or individual state agencies. Cameras, including cell phone cameras, are encouraged but not required or provided.


## Interviewing Materials and Supplies

Prior to each Wave of interviewing, ensure receipt of the following:

- Site Assignment List - A listing of all assignments for each month of the Wave.
- Vessel Goodlist - List of for-hire vessels (charter and headboats) within each state available for FI interviews. This is used as a reference for vessel information pertaining to Box E on the Intercept Form (The Angler Interview: Item-by-Item on p.51) and maintaining active headboats for headboat assignments.
- All forms required to complete the issued assignments - Fls may need to request additional paper materials.
- Mail supplies - Each state will provide the necessary instructions and/or supplies for submitting assignment forms.

Each Site-Based assignment will specify an assigned county, site cluster of one or two sites, date, and specific time interval. Assignments will fall into one of five different time intervals:

| Time Interval | Distinction |
| :---: | :---: |
| 8:00AM - 2:00PM | Day |
| 11:00AM - 5:00PM | Day |
| $2: 00 \mathrm{PM}-8: 00 \mathrm{PM}$ | Day |
| 8:00PM - 2:00AM | Night |
| $2: 00 \mathrm{AM}-8: 00 \mathrm{AM}$ | Night |

Interviewing is not to be conducted outside of the assigned time interval and the FI should arrive at the site at least 5 minutes before the beginning of their assignment. If arriving late to an assigned site, the ending time cannot be extended; it is extremely important to be punctual.

Assignments must begin at the assigned site and at the assigned time to obtain interviews from available fishing modes. When possible, do some advanced checking with the person who is in charge at that site, particularly before going on a headboat assignment.

## Time Limits and I ntervals

The APAIS assignment consists of six hour time blocks where the FI is required to be actively working. Travel time from home to the first site and from the last site back to home is not included. On-site time is designated as the time between the designated start time in site-based assignments (arrival at site for HB assignments) and the stop time of the same assignment. This does not include transit time between sites in two-site clusters. The start time of the second site on the ASF should reflect this by beginning with the FI's arrival time at the second site. That is, the combined on-site time in this situation will not add up to a full six hours. There will be several minutes and up to an hour of transit time which will not be included in the on-site time.

It is important to note that the boat absolutely must dock/land at the site before the end time for the assignment in order for the anglers to be interviewed. Interviewing is not to be conducted outside of the assigned interval. However, if for instance, a private/rental/charter boat returns to the dock just prior to the conclusion of the assignment interval (either 3- or 6 -hours), the FI should write identical interview times for each of this boat party's anglers (e.g., 0759 for 0200-0800, 1359 for 0800-1400, 1959 for 1400-2000, 0159 for 2000-0200, and 1659 for 1100-1700). If this occurs at the end of the first 3 -hour period of a two site cluster, the interviews should be completed as quickly as possible without compromising data collection in order to minimize the impact to time on the second site. Additionally, if an FI is unavoidably late arriving at the first or second sites, the FI must not extend the assignment to make up for the late arrival. For example, if an FI arrives at an assigned site during an 8:00AM - 2:00PM assignment at 8:30AM due to a car accident, they still must complete their interviews through 2:00PM, not 2:30PM.

Depending on the size of the site cluster (one or two sites) the FI is required to split up their on-site time in the following manner:

- SI NGLE SITE CLUSTER assignments only have one assigned site for the entire six hour interval. The FI will arrive at or slightly before the assigned time interval and remain on site for six hours, regardless of if there is activity or not
o Example: Zac is assigned a single site cluster from 8:00AM (0800) to 2:00 PM (1400). Zac arrives at his first site at 7:55AM to survey the site and notify the manager that he will be conducting interviews at the site today. Zac begins interviewing any anglers who have completed their fishing at 8:00AM.

| Cluster | Time 8 AM-2PM |
| :---: | :--- |
| Site 1 | 8:00AM to 2:00 PM <br> (SIX TOTAL HOURS ON SITE TIME) |

- TWO SITE CLUSTERS require the FI to arrive at the first assigned site at the beginning of the assigned time interval. The FI will stay at the first assigned site for three hours then proceed immediately to the second assigned site. The FI will then spend the remaining time of the interval at the second site. This will most likely be less than three hours, but no interviewing or counting should occur outside of the assigned time interval.
o Example: Judy is assigned a two site cluster assignment from 8:00AM (0800) to $2: 00 \mathrm{PM}$ (1400). Judy arrives at her first site at 7:55AM to survey the site and notify the manager that she will be conducting interviews at the site today. Judy begins interviewing any anglers who have completed their fishing at 8:00 AM. She continues to interview any survey eligible anglers until 11:00AM. At 11:00AM, Judy immediately proceeds to her second assigned site which is 25 minutes away. Judy then arrives at her site at 11:25AM and remains at that second site until 2:00PM.

| Cluster | Time 8:00AM - 2:00PM |
| :---: | :---: |
| Site 1 | 8:00AM to 11:00AM (THREE TOTAL HOURS) |
| Travel time 25 minutes to site 2 |  |
| Site 2 | $11: 25 A M ~ t o ~ 2: 00 P M ~$ <br> (TWO HOURS 35 MINUTES TOTAL ON SITE TIME) |

There are two "nighttime" time intervals. Although these assignments are expected to be rather infrequent, they will require being on site through late evening and early morning hours. Both of the nighttime intervals, 2:00AM-8:00AM (0200-0800) and 8:00PM 2:00AM (2000-0200), should have two FIs assigned and working each assignment at sites that have been predetermined to be safe to sample at night. During the 8:00PM - 2:00AM (2000-0200) assignment interval, FIs should continue to use the date of the assignment, even when the time extends past the original date and into the first two hours of the next day. If, for any reason at all, it is unsafe to sample at the assigned site in the night time intervals, FIs should contact their state coordinators as soon as possible. Again, these assignments will be rather infrequent and the safety of the FI in the field is of the utmost importance.

During an assignment, bathroom breaks are permitted; however, these must not occur regularly unless due to an emergency. Additionally, these breaks should be limited to as small of a window as is possible. Review the site prior to assignment and plan ahead if no restroom facility. Much like long traveling by car, use facilities before heading to work if no facility onsite. If on assignment with only one FI, it is required to write down the break on the ASF if the site must be left to find restroom facility.

Sites may be closed upon arrival for the work day and should be handled as previously described with the FI returning to the first site, proceeding to the second site in a two site cluster, or simply documenting the total onsite time for a single site assignment.

## Right Place, Right Time

FIs must be at the right site at the right time for the assignment to be useable. While it is highly encouraged that FIs show up to their assignment early, interviewing can only occur during the assignment time interval. Anglers encountered before or after the assignment time interval should not be recorded in any way on survey forms.

If a party finishes their fishing activity even a minute before the assignment stop time, they should be interviewed. However, if a party comes in later than this stop time, they cannot be interviewed. The assignment time interval is critical to creating meaningful statistical calculations and including any anglers observed outside of the interval will negatively affect catch and effort calculations. There are understood limitations to dockside surveys.

## Arrival at the Site

## Onsite Manager

Upon arriving at the site, check in with the person in-charge (or the person previously contacted) if applicable. Some sites won't have an on-site manager or supervisor, but privately-owned or closely supervised public operations will have a manager in-charge. Both for permission and as a courtesy, FIs should introduce themselves and summarize the purpose of the survey. After the first time or two at a site, these personnel should be familiar with the study and the FI's role. An FI's state-issued identification and copies of a letter from NOAA Fisheries, known as the "To Whom" letter, should be provided to substantiate the legitimacy of the survey and encourage cooperation. Copies of this letter will be provided, and an example appears in Appendix A at the end of this manual. Please note these actions should be completed before the scheduled assignment time. Sampling efforts must begin at the predetermined time.

These letters are extremely important. They are a direct link from NOAA Fisheries to the anglers and should be distributed freely. They are printed on official NOAA Fisheries letterhead to reinforce the study's legitimacy. All business facilities, privately-owned, or
monitored public facilities should be given copies for their files. Always have some copies available when on assignment. Many FIs have said this letter has proved extremely useful in the field not only with managers, but also with the general public. Fls should feel free to hand these out and use them in a manner that will help facilitate cooperation. Be careful not to bombard respondents with too much information, simply be prepared if an angler asks for additional information.

## Assignment Summary Form

Once at the site, FIs can begin to fill out initial site/assignment information on their Assignment Summary Forms (see Assignment Summary Form on p.62). These items describe the basic assignment details and do not require angler interviews to be completed.

## Mode-Specific Procedures for Assignments

The on-site procedures differ slightly for each mode of fishing. The following subsections describe the typical procedures for each fishing mode. Headboat trips are conducted differently and are discussed later in the manual (see Headboat Assignments on p.71).

Regardless of the fishing mode, all anglers must meet the same eligibility requirements to qualify for an intercept. In short, an angler must be fishing in saltwater for recreation, in U.S. waters, and have finished his or her fishing activity within a single fishing mode. For charter and private/rental boats, the boat must return during the assigned six hour window. That is, FIs cannot interview anglers arriving in boats if the boat had returned prior to their assignment time beginning.

## Shore (SH)

While at a site where shore fishing exists, Fls should be stationed at a point of access to the site. This point of access tends to be the entry or exit location of the site, the location accessed most frequently by most anglers.

If a site has multiple access points, try to manage time and/or positioning so that all are covered. When at a beach or bank, FIs will typically have to cover a stretch of coastline with anglers scattered along the area. If there is a predominant exit point from the site (e.g., a central parking area), FIs should be positioned there. If no such point exists, stand in an area where the majority of anglers are within sight and can be approached easily. Close observation of the fishing activity is required since FIs must be alert to anglers leaving the site.

FIs should not be positioned next to a fish cleaning stand, since only anglers with fish will stop at the stand. Standing there could bias the sample towards anglers with catch. If all anglers are actively engaged in fishing, FIs should canvass the area to inform them about the survey, gain their cooperation, and point out where they will be stationed to collect interviews.

By canvassing the site area, FIs will be able to determine the number and location of anglers on-site and a rough approximation of the duration of their trip. With this information, FIs should maximize intercept coverage by planning movements around the anglers. The preliminary canvass should also be used to inform the anglers about the study, and to gain consent to conduct the interview later.

## Private and Rental Boats (PR)

Since there are key differences among the various boat landing/docking facilities, use best judgment to determine the best approach for a particular site. For private boat interviews, the anglers may be interviewed while waiting for a boat hoist or while cleaning the boat at
the dock. Others may be interviewed in the parking lot while waiting for access to a ramp to remove the boat from the water. Use discretion in determining the best approach. However, never distract anyone who is in the process of retrieving their boat to a trailer. Any distraction could result in injury to the individual or damage to the boat.

Keep in mind that canoes and kayaks are two specific types of boats that recreational anglers will use. We want to approach these anglers just as we would those fishing from larger vessels, and administer the screening questionnaire to them to see if they are eligible for the survey.

Ideally, all anglers on all boats will be interviewed. However, time constraints, extreme weather events, and crowded holiday traffic (particularly at large ramps or marinas), do not always allow for this. If it is not possible to interview every angler on every boat, randomly select a subset of boats and anglers to interview. As mentioned before, if there are many boats returning at once, be sure to balance counting and interviewing. While it is preferable to get multiple anglers from one vessel rather than one angler from each of several vessels, FIs should try to avoid entirely missing a given vessel whenever possible.

## Charter Boats (CH)

Intercept procedures for charter boat anglers are essentially the same as those for private and rental boats (described above). One of the differences between charter boats and private/rental boats is that FIs will check either the "Yes" or "No" box in Box E (a check of the vessel on the Vessel Goodlist) and fill in the vessel's name or registration number if available for charter (but not private/rental) boats. If the vessel has no name or
registration number, the on-list check box should be marked and the interview is considered Status 5 (Refused Key Question). FIs should first ask for permission to interview from the boat's captain before explaining the study's purpose. The mate or a crew member is not sufficient, permission must come from the captain. If the captain has already departed from the site prior to intercepting the anglers and an FI cannot obtain their permission, FIs can still interview anglers.

FIs can include anglers in the confirmed counts and continue with the assignment or wait to interview in the parking lot or elsewhere after they have left the boat and dock area.
However, we want to maintain good relations with charter boat captains whenever possible. It should be noted that not all charter boat captains are going to be friendly in the presence of interviewers. They are trying to run a business and in order to maintain happy patrons they may feel that interviewing their customers will hurt any chances of them returning. In a few instances it has been reported that charter boat captains have been hostile toward field interviewers. In these situations it is important to maintain a calm demeanor, thank them for their help, step away and move onto another boat. Do not continue to engage that captain or any anglers on that boat at that point. Once removed from the situation, call the state coordinator for further instructions.

Give the anglers and the crew time to tie the boat off and prepare to leave the vessel before beginning the interviews. The best way to obtain cooperation is to work with the anglers as they prepare to leave. It is effective to begin interviewing anglers as they pack up their gear, take pictures with their catch, and so on. Please be sure to avoid getting in their way. These anglers paid a lot of money for the charter experience, and it's important to respect that.

When it is possible to interview the anglers, FIs should strive to complete individual interviews and catch records for each member of the charter group. However, this may be difficult for charter boats since (1) multiple boats may dock at or around the same time, and (2) anglers may have little control over the handling of their fish, which are often stored together. There are specific rules about how to handle grouped catch discussed later in this
manual. Under no circumstances can interviews be conducted with charter captains
or mates. The captain and crew are not considered "recreational anglers" even though they may have fished. Captains and mates may only be consulted to determine the actual water area fished.

Charters are boats where there are six or less paying anglers. However, if a returning charter boat has seven or more recreational anglers but the boat is listed as a charter boat on the Vessel Goodlist, is advertised as having been charter fishing, or the captain/crew claim it is a charter boat, then interviews should be obtained by the FI. A vessel is determined as a charter/headboat by its designation in the Vessel Directory and Vessel Goodlist. If the status of a charter boat is in question due to too many anglers or a captain disagreeing with designation, the FI should fill out interviews for the passengers as a charter boat but be sure to provide notes on the ASF for NOAA Fisheries. FIs should be sure not confuse charter boat customers with other paying customers of boats identified as headboats or of private/rental boats in which the anglers are non-paying customers. Anglers who share fishing expenses, such as fuel, bait, launch fees, etc., are not for-hire fishers.

## Interviewing and Counting Anglers

## Counting Anglers

In addition to conducting interviews with eligible anglers, the APAIS requires that FIs count eligible anglers who are leaving the site (completed their fishing in the fishing mode of intercept) during the sampling period at each site visited, but who could not be intercepted or interviewed (except in PR/CH/HB mode - wherein, anglers which are not interviewed are considered "Initial Refusals"). This includes anglers who are missed when the FI is busy conducting interviews with other anglers. Counted anglers should not overlap counts of anglers who refuse interviewing (initial refusal), are excluded due to language barriers, or refuse to answer a key question during the interview. Additionally, if an eligible angler responds to an inquiry that they have not fished during the day of the assignment, not finished fishing (unless fishing on a beach or bank - see Beach/Bank Incomplete Trips on p.37), only fished in fresh water, fished with the intention of making money (commercial), exclusively fished for non-finfish species, or fished for a majority of their trip outside of the U.S., the person should not be included in the count.

These counts of exiting anglers are NOT mode-specific within an APAIS assignment. All exiting anglers in Shore mode, Charter Boat mode, and Private/Rental Boat modes are included, following above procedures, in a single aggregate count per site.

The determination of whether to include departing boaters as eligible anglers or just exclude as non-angling boaters is a decision the interviewer must make on the best available information and observations he/she can make. Counts should be the last resort after all attempts to interview all departing anglers are exhausted, or the interviewer is too busy interviewing one angler to detain the subsequent parties for interviewing.

For more details on counting, and for some specific examples, please see the Interviewing and Counting sheet included as Appendix C.

Eligibility Requirements:
To be eligible for an interview, FIs must first determine a few key factors for each angler:

- Is the angler a recreational angler?
- Did the angler target and/ or catch any finfish?
- Was the angler fishing in saltwater?
- Has the angler completed his/ her fishing trip, defined as one waking day of fishing?

All such persons, regardless of age, are eligible. Anglers as young as 5 years old are encouraged to participate. Minors under 5 years old, if not interviewed by proxy via an accompanying adult, should be included as "counted" eligible anglers. However, when interviewing minors (those under the age of 10) FIs should request adult permission. Anglers under the age of 10 can be interviewed by proxy with their accompanying adult. There are no age restrictions on interviewing anglers aged 11 and above.

## Determination of a Recreational Angler

For this survey, a recreational fishing trip is one that is taken for fun or relaxation as opposed to one taken to provide income from the sale of fish. The trip's purpose at the beginning of the day defines the trip. There are a few instances where the exchange of money does not necessarily make an angler ineligible.

Anglers who sell their catch to cover the expense of their fishing trips are not necessarily fishing to provide income; these anglers are eligible. If a commercial angler has an unproductive fishing day, he or she may think about changing the trip's purpose from commercial to recreational—but if the angler started the trip with the purpose of providing income from the sale of fish, he or she is not a recreational angler and should not be interviewed.

## Targeting Finfish or I ncidental Catch by Shell Fishers

Anglers targeting crabs, shrimp, lobster, clams, squid, oysters, and other invertebrates (any species not considered finfish) are eligible for the survey as long as they also targeted or caught finish. For example, if someone is spear fishing for lobster and happens to spear a snapper/grouper they would be eligible. Additionally, if a recreational crabber catches oyster toadfish inside of their traps, that angler would be eligible.

## Determination of Saltwater Fishing

In estuarine areas the definition of saltwater is often difficult. Inland saltwater bodies include sounds, passes, inlets, bays, estuaries, and other areas of salt or brackish water like bayous and canals. Some coastal water bodies are called lakes, but should still be considered saltwater. However, high-salinity, non-coastal lakes (like the Salton Sea in Southern California) are not valid marine recreational fishing areas. At sites where both freshwater and saltwater fishing occur, FIs must ask each angler whether he or she was freshwater or saltwater fishing. Anglers who say they were fishing in freshwater are not eligible for the survey and should not be interviewed.

Note: If FIs know that the angler was not fishing in saltwater, even if the angler says she/he did, do not proceed to interview the angler. Be aware of tidal freshwater areas - just because the river stretch has tidal fluctuations (above saltwater wedge/mixing zone but still tidally influenced), does not mean that it is an eligible fishing area. Upper estuarine or river tributaries must be at least brackish (salinity of $1-3 \mathrm{ppt}$ ) to be considered eligible fishing waters.

## Determination of a Completed Trip

A fishing trip is defined as a day of fishing in one fishing mode (e.g., from shore, from a private/rental boat, from a charter boat) which ends during the assigned interval. Anglers are not eligible for this survey if they are planning to continue fishing from the same fishing mode later in the day, whether they plan on fishing from the intercept site or some other
location. If an angler is intercepted after returning from a recreational fishing trip on a private boat and plans on fishing from a pier later in the day, the angler can be interviewed. If an angler has switched fishing modes, they would be considered to have completed their fishing trip. Separate modes of recreational fishing are considered to be two separate fishing trips. It is important to note that, in order for a trip to be considered finished, the angler must be ending their fishing activity at the assigned site location during the assignment timeframe (e.g., anglers stopping for fuel at a marina would not qualify since, while they may be finished fishing, they may be travelling to another location to trailer/dock their boat). Also, during PR or CH assignments, the angler's fishing trip doesn't necessarily have to have originated at the assignment site; however, it does have to end at this site.

A one-day trip refers to the angler's waking day, as opposed to a calendar day. A trip beginning in the evening, but ending past midnight, is considered one trip. When FIs intercept an angler who has been on a trip lasting several days, most likely a boat trip, each of the angler's waking days is considered a separate trip. Conduct the interview only about the most recent waking day of fishing. In other words, if the angler's waking day was more than 24 hours, only the most recent 24 hours should be considered.

## Canvassing I ntroduction

At some sites, it is possible to build a rapport with the people fishing prior to conducting any interviews. Anglers who have had the opportunity to meet the FI and discuss the survey tend to be more cooperative when it comes time to ask for an interview at the end of a fishing trip. Assuring the respondent that the FI is not part of any enforcement effort and informing him or her about the survey's basic research nature is important for gaining the respondent's initial cooperation and trust in the study.

The canvassing introduction is also useful for determining the most productive time and place to conduct interviews. By determining the estimated times that individuals anticipate their fishing trips will be completed in advance, FIs can better prepare for when these individuals actually finish fishing and can administer the interview.

The process should be very informal and as unobtrusive as possible. The conversation might begin with: "Any luck today?" or "How's the fishing?" Fls should avoid any actions or statements that disrupt the angler's normal fishing habits.

While canvassing, FIs should mention the desire to identify, weigh, and measure the fish caught. Again, it is helpful to stress that FIs are not associated with any enforcement agency. This alone often provides an incentive for the interview in that many anglers like to know the size of the fish they caught. FIs may also begin to look at the fish being caught so that identification time is kept to a minimum during the interview.

## Screening I ntroduction

The Screening Introduction (shown in Figure 4.1) serves two major purposes:

- To introduce the FI and the survey; and
- To determine if the angler is eligible for an interview.


## Figure 4.1: Survey Introduction and Eligibility Determination

## SURVEY INTRODUCTION and DETERMINATION OF ELIGIBILITY

To be eligible for an interview, an angler must:

- Be a saltwater recreational angler who intended to catch finfish;
- Have completed his/her fishing trip, defined as one waking day of fishing;
- Have fished in U.S. waters [If not, code as "Not US" on ASF].

Hello, my name is $\qquad$ and I represent (state agency). We are interviewing marine recreational anglers for a study sponsored by the National Marine Fisheries Service of the U.S. Department of Commerce. I'd like to ask you a few questions about your fishing.

1. Was the primary purpose of your trip today for recreation; that is for fun and relaxation, or was it to provide income either from the sale of fish or from the sale of the fishing opportunity?
Recreation $\longrightarrow$
To provide income $\longrightarrow$ Continue with item 2
[Code as "Not Rec" on ASF]

Item 1 - This question determines whether the angler meets the recreational criteria. A response of "to provide income" will end the screening because the respondent is not a recreational angler. A response of "recreational" to Item 1 will lead to Item 2. In some states an angler may be "commercial" or "recreational" on any given day. FIs must ask about the original intent for the particular trip taken that day, regardless of the type of fishing license possessed.
2. Were you saltwater fishing today? By saltwater fishing, I mean fishing in oceans, sounds, or bays, or in brackish portions of rivers.
$\mathrm{Yes} \longrightarrow \begin{gathered}\text { Continue with question } 3 \text { (if in Maine, ask question 2a) } \\ \text { Thank the angler and end interview, angler not eligible }\end{gathered}$
[Code as "Not Salt" on ASF]

Item 2 - This question verifies that the angler is a saltwater angler. A response of "no" to Item 2 will end the screening. A response of "yes" will lead to Item 3 (unless the FI is in Maine, where the FI should proceed to Item 2a). Use knowledge of the area when screening for this question. For example, if an angler indicates that he/she was fishing in saltwater, but the FI knows that it has been raining heavily, making the fished area actually freshwater because the salt wedge has moved downstream, the FI should terminate the interview.
2a. Was the majority of your fishing in Canadian or Non-US waters?
Yes $\longrightarrow$ Thank the angler and end interview, angler not eligible
No $\longrightarrow$ Continue with question 3

Figure 4.1: Survey Introduction and Eligibility Determination (continued)
Item 2a - In northern areas of Maine, if an FI has reason to believe that an angler may have spent time fishing outside of United States waters, the FI should also ask if the angler fished in Canadian waters. If the majority of his/her effort was not in United States' waters, the angler is not eligible for an interview and the screening should be terminated. If the majority is determined to be in United States' waters, all of the angler's fishing time, catch, etc., should be included on the Intercept questionnaire-even time spent and fish caught in foreign waters.
3. Were you fishing for finfish today?
$\mathrm{Yes} \longrightarrow \begin{gathered}\text { Continue with question } 4 \\ \mathrm{No} \longrightarrow \\ \text { Continue with question } 3 \mathrm{a}\end{gathered}$

Item 3 - This question verifies that the person is targeting finfish. That is, the fishing trip was directed at fish with fins. Note that a person does not have to have caught any finfish to participate; as long as he/she was fishing for finfish they are eligible.

3a. Did you catch any finfish today?
$\mathrm{Yes} \longrightarrow$ Continue

Item 3a - Shell fishermen (or any invertebrate target such as octopus, squid, etc.) may have caught finfish although it was not the primary target. These shell fishermen are eligible if one or more finfish were incidentally caught.
4. Have you completed your saltwater fishing today?
$\mathrm{Yes} \longrightarrow$
$\mathrm{No} \longrightarrow$ Angler is eligible, start main APAIS questionnaire

Item 4 - Marine recreational anglers who intended to catch finfish are asked whether they have completed their fishing for the day. The FI should consider all parameters of the "Determination of Completed Anglers" section. If the response is "yes," the angler is eligible for the survey and the FI should start the main Intercept Questionnaire at this point. If the response is "no," the FI will continue by asking Item 5 . Under very special circumstances in beach/ bank mode only, some anglers will be eligible for the interview even if they have not completed their fishing for the day.
5. Will you still be fishing from a (SPECIFY FISHING MODE)?

Same mode $\longrightarrow$ Thank the angler and end interview, angler not eligible [Code as "Not Done" on ASF if angler remains at site until end of assignment; code nothing if angler leaves but plans to resume fishing in the same fishing mode later]
Different mode $\longrightarrow$ Angler is eligible, start main APAIS questionnaire

Item 5-Anglers who are coming back to the same site to fish are eligible ONLY if they plan to fish from a different mode when they return. They are not eligible if they are planning to fish from the same mode at the same site later in the day.

The Screening Introduction is just a guide to introduce the survey and gain cooperation. When approaching an angler, the FI should introduce themselves and tell the angler that the study being conducted is sponsored by NOAA Fisheries. At no time should the FI claim to be an employee of NOAA Fisheries. If the angler is willing to cooperate, then ask the eligibility questions and complete the screener to verify angler eligibility. Remember that
angler screening questions must be repeated for each new angler interviewed, regardless of whether interviewed anglers were fishing together or not.

The screening process is basically a checklist that the FI will go through to determine if the angler is eligible. FIs do not need to record any responses or submit screening
forms. As the FI becomes more experienced with the survey, he/she should be able to recite the screener without a script.

## Privacy Act Statement

As soon as the angler's eligibility is established, FIs should read the provided shortened version of the Privacy Act statement. An abbreviated version of this statement appears on the Intercept Form right before the FI starts asking the angler the intercept questions.

READ PRIVACY ACT: This study is being conducted in accordance with the privacy act of 1974. You are not required to answer any question that you consider to be an invasion of your privacy.

While this rather short statement must be read to all anglers interviewed, FIs will be givenand must carry-several copies of a Ionger Privacy Act Statement. These copies should be handed out to anglers who request more information. FIs are legally required to always have at least one copy of the Privacy Act available to anglers at all times. FIs should call their supervisor for more copies, or make photocopies of the last one, but should never hand out the last copy. An example of the Privacy Act Statement is in Figure 4.2.

## Figure 4.2: Privacy Act Statement

All surveys conducted by the Federal Government are regulated by the Privacy Act of 1974. This Act stipulates that each person interviewed must be informed of the following: (1) The auspices under which the survey is being conducted; (2) That participation is voluntary; and (3) How the information will be used. The Privacy Act also stipulates that this information must be available to each survey respondent in written form. While this information is outlined on the handout, most anglers are satisfied after hearing the abbreviated statement. The Privacy Act Statement reads as follows:
Information collected in the Atlantic Intercept Survey is authorized under the Fish and Wildlife Act of 1956, the Migratory Marine Fish Act of 1959, and the Fishery Conservation and Management Act of 1976. This information will be used in assessing the influence of fishing on any fish stock and in determining recreational fishing needs.
All information collected will be combined with information provided by other recreational anglers and used only for statistical purposes. Any information which would permit identification of the individual will be held in strictest confidence and will be used only by persons engaged in and for the purpose of the survey.
Participation in the survey is voluntary and there are no penalties for refusing to answer any questions. However, your cooperation in obtaining this much needed information is extremely important in order to ensure the completeness and accuracy of the statistical data.

## The Angler I nterview: General I nstructions

The actual interview begins after eligibility has been established and the Privacy Act statement has been read. This is the questionnaire that is read to, and answered by, respondents. It is therefore very important to read the questions verbatim and in the exact order in which they appear. Each angler interviewed should be read these questions in exactly the same way. Failing to do so may introduce bias to the questionnaire. This maximizes data quality and consistency across respondents.

The following is a list of protocols to adhere to when administering an intercept:

## A. In general, ask the questions as written.

Reading the questions as they appear will help FIs become more skilled in conducting the interview. However, we recognize that there may be some instances in which using a more conversational tone could be helpful. FIs may restate a given question in a slightly different way if it helps the angler better understand what information is being requested.

## B. Ask every question specified in the questionnaire according to the instructions.

Never presume that the answer to an upcoming question has already been provided by a previous answer. The answer received in the context of one question may not be the same answer that would be received when the specific question is asked. The only questions that should not be asked are those that are skipped as part of a skip pattern.

## C. Read the complete question and all response choices (when applicable).

The respondent may interrupt and answer before having heard the complete question. When this happens, read the question again, making sure the respondent hears it through to the end. Do not assume a premature response applies to the question as written.
D. Read the questions slowly enough to be understood but maintain a good pace.

As FIs become more familiar with the questionnaire, they may be tempted to read through the questions more quickly, perhaps in an effort to reduce the burden for respondents in terms of the time spent doing the interview. However, FIs must remember that some of the respondents have never heard the questions before. Therefore, FIs must read slowly enough to allow for everything that is asked to be understood. A pace of about one or two words per second is usually appropriate. Even if the respondent is in a hurry, the questions should not be read quicker, because this puts the integrity of the interview at risk. If the respondent is rushed, politely remind the respondent of the importance of this study.

## E. Do not suggest answers to the respondent.

As FIs progress through the questionnaire, they will come across questions to which they might think they know the answers, based on prior information given. This situation can lead to a tendency to suggest answers to the respondent. Avoid this tendency and instead read the question as written.

## F. Give the respondent plenty of time to choose each response.

Some respondents may believe that they are taking too long to answer the questions and may rush through the questionnaire. Do not rush the respondent, and be sure to allow the respondent to take as long as needed to give a response.

## G. Follow instructions to the FI uniformly.

When administering the survey, FIs should follow the instructions and procedures exactly the same way for each interview.

## H. Entries made by the FI should be accurate and clear.

Make sure that entries are correct, and that the entries are recorded accurately and legibly. Always fill out Intercept Forms in pencil or black/blue ink. Have legible handwriting. All common species names should also be written in CAPITAL letters.

## Probing

One aspect of asking questions relates to probing. Probing is a technique used to ensure that the answers given by a respondent are as accurate and complete as possible. Effective probes serve two purposes:

- to encourage respondents to express themselves completely, and
- to help respondents focus on the specific requirements of the question.

To know when to use a probe, FIs must be thoroughly familiar with the questionnaire and know the objectives of each question; that is, FIs must know what is being measured and what constitutes an acceptable response. Otherwise, it will be difficult to judge the adequacy of a response. All probes must stimulate thought and response without suggesting possible answers. Only neutral or nondirective probes are used in the interview. Some examples of proper probing techniques follow.

## Neutral questions or statements

These probes encourage a respondent to further explain or elaborate on a response and must be stated in a neutral or non-challenging tone. Some examples of neutral probes are the following:

- What do you mean?
- Please explain that. . . .
- Which would you say is closest?


## Clarification

Clarification probes are to be used when judging the respondent's answer to be unclear, inconsistent, ambiguous, or contradictory. However, FIs must take care not to appear to challenge the respondent; instead, tactfully express concern over not completely understanding the nature of the response. Some examples are the following:

- "I'm not quite sure I understand what you mean by that. Could you tell me a little more?"
- "I'm sorry, but a few minutes ago I thought you said [CONTRADICTORY INFORMATION]. Could you clarify this for me?"


## Encouragement

This technique involves conveying to the respondent that the FI understands what he or she has said and would like to hear more. This technique would include the use of phrases like "I see . . .," "That's interesting . . . ," and so forth. Nonverbal probes of this nature include a nod of the head or an expectant expression.

## Repetition

Repetition could be either repeating the question or repeating the response. The former is useful when it appears that the respondent may have misunderstood the question or deviates from the topic at hand. The latter technique of repeating the response may produce additional comments or explanation from the respondent, especially if FIs say it in the form of a question. For example, Item 11 is concerned with where the person was fishing: "Would you say you were fishing from...<READ ANSWER CHOICES>." If he or she doesn't understand, FIs might say, "This question is asking where you spent the majority of your time fishing today. Please listen to these answer choices and pick the most appropriate." Never suggest or attempt to conclude an answer. Even if it's obvious that the
person was, for example, pier fishing, FIs must ask the question and read all the answer choices. FI should never assume a response.

## Angler Responses

In addition to encouraging anglers to respond to survey questions, FIs should also probe high numbers of reported fish and/or unusual species. For instance, if an angler reports having caught and released 150 striped bass in 0.5 hours of fishing from a private boat, the FI should realize that this is unusual. In this particular instance, the FI should probe to make sure the angler was referring to ONLY themselves (Type 2 cannot be split between anglers in a party), whether this was just a far-off estimate of catch, and also be aware of an angler's state and tone of response.

## General Tips

When completing the intercept FIs should remember the following items:
Codes for Not Applicable Questions - as a rule, items that are not applicable to a particular angler are coded with " 8 " as indicated on the Intercept Form.

Codes for Refused Questions - Items on the Intercept Form that the angler refuses to answer are coded with " 9 ." If the angler refuses a key item (an item with an asterisk on the Intercept Form), FIs should code that item with " 9 " and terminate the interview. If the angler refuses a non-key item (an item without an asterisk on the Intercept Form), code that item with " 9 " and continue with the next question. An interview with a refused non-key item is considered a Status 2 interview.

Codes for Don't Know - Items on the Intercept Form that the angler does not know the answer to should be coded with " 8 ", " 98 ", " 998 ", " 9998 ", or "99998" as specified. An interview with a "don't know" answer to a key item is considered a Status 5 interview.

Right Justify and Add Leading Zeros - If an answer does not require the use of all boxes provided, FIs are required to right justify the entry and add leading zeros. For example, if a fish measures 262 mm , the entry, given four coding boxes, should be "0262."
"Other (SPECIFY)" - For Items 11, 12, and 14, the response codes are not exhaustive. Separate codes have been designated for "Other (SPECIFY)." If an angler gives a response not covered by the pre-coded responses, Fls should enter the "other" code, and write out the angler's exact response in the space provided.

Comments/ Notes - for some items, notes are required under certain conditions. Examples include: (1) If weight and/or length measurements are missing for Item 31; (2) If a state and/or county code is not in the Coding Manual and is needed for Item 20; or (3) If a species code is not in the Coding Manual and is needed for Items 17, 25 or 31. In such cases, place an asterisk (*) in the space outside of the red box near the item and provide a footnote on the Intercept Form explaining the situation. A detailed note for any fish recorded as disposition 6 (thrown back dead/plan to throw away) or 7 (some other purpose) is also required.

## The Angler Interview: Key Items

"Key items" are those questions marked with an asterisk on the Intercept Form. They are questions that must be answered in order for the intercept to be considered complete. If at any time any of these questions are refused, then the intercept is not considered completed and must be marked as so. Key items include fishing mode (Item 11), area in which the majority of fishing took place (Item 12), distance from shore (Item 13), state and county of residence (Item 20), group catch questions (Items 26-29), Type 2 records (Item 25),
fishing party information (Item 30 \& Box D), on-list question for the FHS (Box E), and Type 3 records (Item 31).

In order to avoid incomplete intercepts, FIs should follow the conventions outlined in this manual. FIs should also note that they will want to Provide Definitions, Not Answers - if the angler asks for an opinion about an item, provide a definition for the item in question rather than supplying the actual response. If an angler is unsure about whether he/she was fishing from a headboat or a charter boat (Item 11), FIs should utilize their list of vessels as well as context clues from vessel advertisements to determine whether the angler was on a charter or headboat.

Refusal to Key Item - All Intercept Forms with a refusal to a key item are Status 5 interviews. These interviews are not considered good interviews, but should be included on the Assignment Summary Form (ASF) in the Refused Key Question column. Please include Status 5 Intercept Forms in the packet being sent to the state coordinator. While it is not necessary to number the Status 5 intercepts, it is not a problem to keep the intercept number as long as the count of completed and refused key item questions is accurate.

## The Angler I nterview: I tem-by-I tem I nstruction

## Items Completed by the FI

Items two through ten will be completed by FIs based on information about the assignment and each particular interview - FIs will not be asking the angler about these items.

Item 1 - Form - Prefilled barcode used to identify which form is being scanned in order to accurately input survey data.

1. FORM


Item 2 - Assignment No. - FIs will only complete one assignment per day, thus the assignment number will be prefilled with a number " 1 ". In the case of a second assignment being completed by an interviewer in the same day, be sure to white out the " 1 ", enter a " 2 " if it is the second assignment for the day, include a note on the ASF, and also notify the state coordinator so the ATA can be properly updated.
2. ASSIGNMENT NO.


Item 3-Interviewer ID - Each FI has a unique four-digit identification number. This number must be used on all submitted forms.
3. INTERVIEWER ID


Item 4 - Year/ Month/ Day - Record the date of the intercept. Two digits should be used for the month and for the day. Please make sure to record the MONTH before the DATE.
4. DATE: MM/DD


Item 5-Intercept No. - Throughout an assignment, consecutively number all good Intercept Forms completed on that assignment. All Status 1 and Status 2 Intercept Forms are considered good, while Status 5 Intercept Forms are not.
5. INTERCEPT NO.


Status 5 Intercept Forms should be kept in order of Status 1 and 2 intercept, given an intercept number, coded as "Refused Key Question" on the ASF, and be submitted amongst assignment intercepts for that assignment in the package sent to the ACCSP.

Item 6 - I nterview Time - Using military time, record the time the angler was completely done being interviewed. This procedure is the same for HB interviews even though angler interviews begin on the ride out. Military time runs on a 24 -hour clock starting at 0001 hours (one minute past midnight) and ending at 2400 hours (midnight). For example, 4:45 PM should be coded " 1645 " hours. Each I ntercept Form should have a unique interview time. The only time interview times can be the same is if an FI finishes multiple anglers who had finished fishing right before the time interval. In this instance, the FI should stack all completed intercepts as the last possible minute of the assignment (Example: an FI finishes interviewing a group of three anglers who had arrived at 19:55 but did not finished interviewing until after the end of their assignment interval (20:00). All interview times should be 20:00). Otherwise, if interviewing more than one angler at the same time, interview times should be one minute apart. (Example: an FI finishes interviewing a group of three anglers at 16:45; the first angler should be assigned an interview time of 16:45, the second angler a time of 16:46, and the third angler a time of $16: 47$.) Do not pre-fill intercept time; this should be filled in after the interview is complete.


Item 7 - State Code - Enter the two-digit numerical code for the state of the intercept. State codes can be found in the Coding Manual.

Item 8 - County Code - Enter the three-digit numerical code for the county of intercept. County codes can be located in the Site Register, or in the Coding Manual.

Item 9 - Site Code - Enter the four digit numerical code for the site where the interview was conducted. Site codes and names are unique, and are found in the Site Register (note that site number is also provided in the assignment schedule).


Item 10 - Interview Status - This item must be completed at the end of the interview. It serves as an indicator of interview "completeness." Only interviews of Status 1 or 2 are good interviews, with valid answers to all key items. An interview of Status of 5 is not considered a good interview.

| 10. INTERVIEW | STATUS (Key Item $={ }^{*}$ ) |  |
| ---: | :--- | :--- |
| 1 | $\square$ | Questionnaire Complete |
| 2 | $\square$ | Refused Non-Key Item |
| 5 | $\square$ | Refused Key Item |

"Questionnaire complete = 1" - This code should be used if the angler responds to all items asked in the interview. In other words, the angler does not refuse to answer any question.
"Refused non-key items = 2" - This code should be used if the angler refuses, or is unable to answer, one or more non-key items-but answers all key items. If an angler refuses a non-key item, code that item as "refused" and continue with the next question. If an angler is unable to answer a non-key item, code that item as "don't know" and continue with the next question. Refusal of a name or phone number, or an angler that is a minor represent the most common reasons to code an interview as Status 2.
"Refused key item = 5" - This code should be used if the angler refuses to answer a key item. If a key item is refused, code that item with " 9 ," thank the angler, and terminate the interview. FIs should submit all Status 5 Intercept Forms and be sure to record each under the "Refused Key Question" section of the ASF. Totals of "Complete" intercepts should never include Status 5 intercepts, even if these intercepts have an intercept number.

## Items Asked of the Angler

Items 11 through 31 are questions that FIs will ask each angler. Boxes A, B, C, D, and E contain either instructions to the FI or items to be recorded by the FI - they are not asked of the angler. As indicated on the form, before these questions can be administered, FIs must read the Privacy Act to the angler.

READ PRIVACY ACT: This study is being conducted in accordance with the privacy act of 1974. You are not required to answer any question that you consider to be an invasion of your privacy.
*Item 11 - Fishing from Which Mode? - Use discretion in the wording of this question for shore (SH) anglers. Obviously, if an angler is leaving a pier from which no boat fishing was possible, it is inappropriate to ask whether that angler was fishing from a charter boat. For example, a pier angler could be asked: "Would you say you were fishing from a pier, a jetty, breakwater, etc.?" Always include responses from at least two coding categories in the stem of the question. Do not make assumptions about the mode of fishing, sites will routinely have multiple modes present.
*11. Would you say you were fishing from ...


All charter boat ( CH ) and private/rental boat (PR) anglers should be offered three boat alternatives: "Would you say you were fishing from a charter boat, a private boat, or a rental boat?" If the angler has difficulty with the definition of a particular mode, provide definitions and let the angler decide.
*Item 12 - Type of Waterbody Fished - Anglers are asked what type of water body they did most of their fishing in. Color-coded sections, connected by arrows should more easily allow interviewers to correctly fill in Item 12 and 13. If Item 12 is filled in as "Ocean/gulf", Item 13 should either be filled in as "Three Miles or Less From Shore" or "More Than Three Miles" but never "Waterbody Does Not Apply." The same logic applies for all options within the white box for Item 12; wherein "Waterbody Does Not Apply" should only be filled in for Item 13 and never the two options within the red box.

For a shore (SH) angler, it may not be necessary to ask Item 12. An example of when it's not necessary to ask is when Fls have observed the angler fishing and know the correct water body. For example, when at a site that only has shore mode access in the Chesapeake Bay, common sense tells Fls that the angler was fishing in the Chesapeake Estuary (F). Similarly, if an FI has ridden on a headboat they should be able to code the correct response without asking the question to the anglers or with the captain's help.


If the angler fished in more than one water body, that angler should be asked in which water body the majority of time fishing was spent.

Any form coded with a " 5 " (other water body) must have the specific water body written on the line provided.
*Item 13 - Area Fished - Please keep in mind that anglers fishing along the shore (SH) AND fishing in the ocean/gulf (response to Item $12=$ " 1 ") must have fished within three miles of shore - therefore there is no need to ask Item 13. In this case, FIs should automatically mark Item 13 with a " 1 " (three miles or less.) Otherwise ask:

Anglers fishing in the boat modes (PR, CH, HB) in the ocean/gulf bay must be asked Item 13. The captain of a charter boat may be able to give FIs a more definitive response if the anglers are unsure. If on a headboat, FIs should ask the captain how far offshore the boat had been.

Item 13 is used to determine the effort and catch in state versus Federal jurisdictions. State jurisdiction occurs within the state territorial sea, while Federal jurisdiction occurs in open waters beyond the territorial sea. Most States' territorial seas extend three miles from
shore. Any interviewing done along the Eastern Coast of the Atlantic Ocean from Maine to Georgia will only use responses 1,2 , and 8.

## Bays, Sounds, Rivers, and Inlets

For item 12 (Type of Water Fished), if the angler responds with an answer other than "ocean/gulf", the FI will need to probe to determine the correct response. The follow-up probe is: "What (sound/river/bay/inlet) was that?" For the purposes of the APAIS, if the named sound, river, bay or inlet is not part of a listed estuary, the FI should code " 2 " for sound, " 3 " for river, or " 4 " for bay. "Inlet" should be coded " 5 " (unless it is part of one of the National Estuaries listed), with the word "inlet" (and the specific name, if applicable) written out in the white space adjacent to Item 12 on the Coding Form. "Named" water bodies have names which are documented on official nautical charts.

It is very important that any bays, rivers, sounds, or inlets that are part of, or wholly inside, any of the named estuaries be coded by the named estuary, NOT using the numeric code for sound, river, or bay. If the angler responds that he fished in a sound, river, or bay that the FI is not familiar with, then FIs should specifically ask "Is that ( $\qquad$ ) sound, river, bay in any of these estuaries?" and name those that are reachable from the interview site (i.e., it would not be necessary to offer "Is that part of Hudson-Raritan Estuary?" if interviewing was taking place at a Maryland site, but it would be appropriate to ask "Is that
$\qquad$ ) sound, river, bay in the Chesapeake Estuary, or the Delaware?"

Note on bays: The general definition of a bay is an area of water bordered by land on three sides. Bays generally have calmer waters than the surrounding sea, due to the surrounding land blocking some Waves and often reducing winds. Cape Cod Bay has a unique code ( V ) on the Intercept Form. All other true bays should be coded as 4 . For the Mid-Atlantic States from VA up to NY, many of the bays are located between the mainland and a sandy barrier island, with a narrow inlet that allows passage to the ocean. In the New England states, the bays tend to be rocky indentations in the coastline.

Item 13a - Reef Code - This item is asked for all PR, CH, and HB anglers. If the angler is fishing from shore, the "No" check box should be marked without filling in a reef code. Fishing an artificial reef is defined as the angler intentionally selecting a fishing location with man-made structure. If the angler asks for clarification regarding fishing distance from the artificial reef, the interviewer should respond "Fishing close enough to the structure you felt it increased your chances of catching fish."

13a. Were you fishing an artificial reef today?


Item 14 - Gear - This is asked of all anglers. If the angler has used more than one type of gear, he/she should be asked which he/she spent more time using.

| 01 | Hook and Line | 07 | Trap |
| :---: | :---: | :---: | :---: |
| 02 | Dip Net, A-frame | 08 | Spear |
| 03 | Cast Net | 09 | Hand |
| 04 | Gill Net | 10 | Other (Specify) |
| 05 | Seine | 98 | Unknown |
| 06 | Trawl | 99 | Refused |

Definitions for fishing gears are:

- Hook and Line - Traditional rod and reel or hand lines. Trolling, surf fishing, bottom fishing, chum fishing, and fishing with floats are all examples of uses of this gear.
- Dip Net - A small hand net consisting of a handle attached to a metal ring with mesh attached, often used to land large fish but also used to catch schools of smaller fish. An example of the use of this gear is to catch baitfish in tide pools.
- Cast Net - A large net, weighted around the edges, which is cast out and falls over the fish, thereby entrapping them. This gear is typically used to catch baitfish or shrimp.
- Gill Net - A flat net suspended vertically in the water with mesh that allows the fish's head to enter the net but which catches on the fish's gills as it attempts to withdraw.
- Seine - A large net with weights on one end and floats on the other used to enclose fish after dragging along the bottom near shore by hand.
- Trawl - A large cone-shaped net, which is dragged along the bottom from a boat.
- Trap - Usually a metal screen box, extended by a rope, which has bait inside and a small hole, which the fish can swim into but not return. Examples are fish pots and crab traps.
- Spear - A sharp, barbed pole that is projected or thrown into the fish. Examples are flounder gigs and SCUBA diving spears.
- Hand - Catching fish by hand without the aid of any implements. Examples are picking up fish trapped in tide pools or those chased onto the beach by predators.
- Other - If an angler is fishing with anything else than the gears listed here, check this box and record the gear that was used on the line. Examples of "other" gear include bow and arrow.

Item 15a - Time Fishing - All anglers are asked how many hours they spent fishing with gear in the water in one of the fishing modes ( $\mathrm{SH}, \mathrm{PR}, \mathrm{CH}, \mathrm{HB}$ ) on that day. If the angler fished at more than one site in the same fishing mode of the intercept, he/she should be reminded to include all hours spent in that fishing mode at all sites. If the angler fished at any site (including the site of intercept or any other site during that same day) in a different fishing mode, then the intercepted angler should not include time spent fishing in the non-intercept mode.

15a. To the nearest half-hour, how many hours have you spent (specify mode) fishing today? That is, how many hours have you actually spent with your gear in the water?


Since a trip is defined as fishing in one fishing mode in one waking day, only waking day hours should be entered. This should never exceed 24.0 hours. A box with a pre-coded decimal has been provided and that the question requires "to the nearest half hour." Only " 0 " or "5" should appear in the last box. As indicated, please enter "99.9" for hours fished if the angler is unable to answer the question or refuses.

Item 15b - Time on Boat - All anglers fishing from a boat are asked how many hours they spent away from the dock, in the mode of intercept on the day of intercept. This question is meant to measure trip time. Do not include time spent in the boat while the boat
is at the dock. In most cases, the boat time for anglers interviewed on the same boat should be identical. If the time on boat is different for anglers in the same party, a comment explaining the situation should be written on the form.

The angler should include the time spent with the gear in the water. Therefore, 15b should be greater than or equal to 15a.


Please code Item 15b as "Not Applicable" if the angler is fishing from the shore. Code as " 99.9 " if the angler is unable to answer the question or refuses.

Item 16 - Additional Hours - The only anglers FIs are allowed to interview before they are done are those fishing from a beach/bank, and who meet the additional rules, below. For all other anglers, code Item 16 as "Not fishing from beach or bank." If the angler was fishing from the beach or a bank, FIs must enter a response for additional beach/ bank hours. If the angler was fishing from beach/bank, and is done fishing, please enter " 00.0 " as the response (representing no additional hours). If he/she was not done fishing, please enter the number of hours he/she expects to fish after completing the interview.


## Beach/ Bank I ncomplete Trips

This is the only exception to the completed trip rule: all anglers must be done with their fishing activity in a given mode for the assigned day except those in beach/ bank mode. In order to be able to interview an angler fishing from the beach or bank who is not done fishing, FIs must (1) be in the second half of the allotted time for that site, and (2) confirm with the angler that he or she will not be done before the FI is scheduled to leave that site. For example, if it is a two cluster site requiring interviews at the first site for three hours, FIs can only collect incomplete angler trip interviews after being on site for an hour and a half. These anglers are not to be included in the counts, and they are not to be included in the "Not Done" column. If there are relatively few anglers onsite during the assignment, it is best to wait and see if any anglers complete their fishing for the day rather than obtaining an incomplete angler trip.

Item 17 - Target Species - Ask all anglers to name the kinds of fish they were fishing for. Enter the species name(s) on the line(s) provided above the coding boxes and look up the code(s) after the interview is completed.
17. What species were you primarily fishing for today?

No Particular Species / Anything


If the angler says "anything," or "nothing in particular," check the box marked "No Particular Species / Anything" and leave the coding boxes blank. If the angler mentions only one species, it should be coded under " 1 st Target," with " 2 nd Target" left blank. If the angler names two or more species, code only the first two mentioned.

Because we would like the most specific fish identification possible, if the angler names a family of fish, FIs should probe to determine whether he/she preferred a particular species in that family. For example: "Did you target any particular kind of drum?" If the angler has no preference within the family of fish, and several species are possible within that family, enter the family code. If, however, the FI knows that the angler could only be going after one species within that family, enter that species code. For this item, knowledge of how local names translate to exact species is very important. If the angler uses a local name for a fish, enter the accepted common name on the Intercept Form, and make a note of it in the comments section or next to the accepted common name. A list of local names and the corresponding accepted common names is found in the Coding Manual.

Only record reasonable responses to this item. If an angler responds that he/she was fishing for a species not found in the area, this response should not be coded. For example, it is not reasonable that anyone would fish for oceanic pelagic species like blue marlin from an inland pier.

Item 18 - Days in Past 12 Months - All anglers are asked how many days they have been saltwater sport finfishing within the state of intercept, or from a boat launched in the state of intercept, excluding the day of intercept, in the past 12 months.
18. Not counting today, within the past 12 months, that is since (insert month) of last year, how many days have you gone saltwater sport finfishing in this state or from a boat launched in this state?


The wording of this item is very important. The angler should think back to the same date in the previous year. He/she should not include days spent freshwater fishing, commercially fishing, shell fishing, or days spent fishing in other states.

Fls may have to work with an angler to come up with a specific number. Anglers are likely to say something like "every week" or "once a month." In these instances, translate the response to a number and verify that number with the angler.

Because the day of intercept is not included, the maximum number of days that can be entered for this item is "364," and the minimum acceptable entry is "000" (meaning that the day in which the FI is interviewing them is the only day in the last 12 months that they have been saltwater finfishing). Please code Item 18 as "998" for "Don't Know" and "999" for "Refused."

Item 19 - Days in Past Two Months - Anglers are also asked how many days they have been saltwater sport finfishing in the state of intercept, or from a boat launched in the state of intercept, excluding the day of intercept, in the past two months.
19. Not counting today, within the past 2 months, how many days?


Since the question requires days, and the day of intercept should not be included, the maximum number of days that can be entered for item 19 is 59-60, depending on the month. The minimum number of days is " 00 " (meaning that the day in which the FI is
interviewing them is the only day in the last two months that they have been saltwater finfishing). Please use code "98" for "Don't Know" and code "99" for "Refused."

It is important that FIs check the answer to Item 19 against the answer to Item 18. The number of days in Item 19 cannot be greater than the number of days in Item 18. (Item 18 includes the two months from Item 19.)

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If asked by angler, FIs should clarify that we would like to know the state and county of the angler's legal residence. After completing the interview, use the Coding Manual to fill in the correct state and county codes.

If an angler is a resident of some country other than the United States, please write the country name on the line provided, fill the foreign country FIPS code of " 97 " into the state code box and fill in "997" for the county code. Puerto Rico and the U.S. Virgin Islands are not considered foreign countries, and are included in the Coding Manual. Please make sure to complete the county information for these as would be done with any other state.

Item 21 - ZI P Code - All anglers are asked for the ZIP Code of their residence. The ZIP Code given should be of the residence named by state and county in Item 20. Again, if asked, explain that we are looking for the angler's legal residence. If an angler is a resident of some country other than the United States, check the box labeled "99997." "99998" should be used for "Don't Know" and "99999" for "Refused."


Item 23 - Residential Mail Address - This is asked of all anglers. The intent of this is to determine how the angler receives residential mail. Multiple answers can be marked for this question but make sure to fill out either Yes or No for each option.


Item 23a-Gender - This item should not be asked but instead observed by the FI.
Item 23b - Age - This item is asked for all anglers. If younger than 10, FIs should use a leading zero (e.g., "09" for a nine-year-old angler).


Item 24 - Name and Phone Number - All anglers are asked for their name and a telephone number for survey verification. Survey verification is an important quality control step and demonstrates that our FIs are conducting the survey as required. Names of anglers should be written in CAPITAL letters only within the allotted box limit. If the angler's name is longer than the box limit, FIs can write the full name in the margins of the Intercept. The angler's phone number should be neatly written in the space provided. FIs should make sure that an area code is included.

If the angler is a minor, do not ask for a phone number for verification. Instead, check both boxes (name and/or phone number not given and angler aged 16 years or younger), and the questionnaire becomes a Status 2. Make sure that item 10 is checked as "2-Refused non-key item."

It is not necessary to obtain the angler's home telephone number. Any number at which he/she can be reached is acceptable. FIs should ask the angler whether they would prefer to be contact at day or night. If there is a preference, FIs should either check "Day" or "Night" in Item 24. The boxes should only be checked if the angler clearly states a preference. If no preference is provided, both check boxes should be left blank. Failure to obtain the angler's name and a phone number will make the interview a Status 2 even if all other questions have been completed.


Box B - This box must be completed for every interview, regardless of the fishing mode in which the interview was collected. If an FI is NOT riding a headboat, then they must check the box "not a headboat ride." If the FI is riding a headboat, then either the "Yes" or "No" box will be checked depending on whether or not the angler was being monitored for discarded (Type 9) catch. If the angler was monitored for discards, all of the discards for that angler should be recorded on the discard form.

[^1]It is possible to check "yes" in Box B (did observe angler for discards) and not have any fish listed on the discard form because the angler did not catch any fish that were discarded. If this happens, make sure to write a note about it in the comments section.
*Item 25 - Unavailable Catch (Type 2 Records) - All anglers are asked to report on fish caught in the mode of intercept that are not available for inspection. Unavailable fish should be entered at Item 25 on the Intercept Form. All common species names should also be written in CAPITAL letters.

*25. UNAVAILABLE CATCH | Did you catch any fish that are not here for me to look at? For example, any that you may have thrown back or |
| :--- |
| used for bait? NOT GROUP CATCH - Only catch from Angler being interviewed. |

| Disposition Codes for Q25 |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: |
| 1 - Thrown back alive | $4-$ Used/plan to use for bait | $6-$ Thrown back dead/plan to throw away |  |  |
| 3 - Eaten/plan to eat | $5-$ Sold/plan to sell | 7 - Some other purpose |  |  |

TYPE 2 RECORDS: (CATCH UNAVAILABLE IN WHOLE FORM; FILLETS ARE UNAVAILABLE CATCH.)


Note: Any fish that the FI is unable to positively identify AND count MUST be recorded as "unavailable catch" (under Item 25). Each fish must counted and identified in order for it to be recorded as "available catch" (Item 31). NOAA Fisheries maintains this rule because we are confident in each FI's ability to identify fish to the species-level and to accurately count how many of each species are present. However, FIs should not be 100\% confident in all anglers' ability to accurately identify fish to the species-level. Even one misidentified fish will result in the recording of inaccurate information, which is one reason why we need to record all information reported by anglers, but not verified by the FI as "unavailable catch."

It is possible to record some fish of the same species as "unavailable catch" and other fish as "available catch." If an angler tells the FI that he has five Atlantic Cod in a cooler, and that they are only allowed to positively identify and count three of them, record the three Atlantic Cod as "available catch" and the other two as "unavailable catch." FIs cannot be sure that the other fish were Atlantic Cod or that there were two of them, if the FI was unable to see them. Please call the state coordinator with any questions about this. It is very important to understand the proper procedures regarding "unavailable" and "available catch."

A separate line must be filled in for each unique species-disposition combination. Each line of information is called a "Type 2" record. Each "Type 2" record must contain a species name, a six-digit species code, the number of fish, and a disposition code.

Species name and code, number of fish, and disposition are key items. These cannot ever be left blank. It is also important that FIs write out the full species name (be sure to use the accepted common name found in the Coding Manual). Abbreviations and local names are not acceptable.

FIs should strive to report an angler's Type 2 catch to the species-level. Since FIs cannot inspect or count unavailable catch, it is recognized that the species and numbers reported may not be exact. It is not appropriate to suggest species identification through the use of field guide pictures in order to clarify a fish species. This leads the angler to make a decision based on what he/she is shown. Using probing questions, FIs can attempt to narrow down the choices if the angler cannot come up with a name (or a specific-enough name); however, all answers must be provided by the angler. For instance, if an angler responds that they had caught "drum", FIs should respond with a question similar to "Did
you catch any particular kind of drum?" Additionally, if the angler states a local name for a species, FIs should translate to the actual common name of the species. Local names can be found within the provided Coding Manual.

If it is not possible to obtain a species-level identification, please record the appropriate code that is as close to the species-level as possible. If necessary, one of the unidentified species codes may be used as a last resort.

Note: If an angler refuses to allow the FI to see or count his/her catch, but he/she reports the catch, list the catch in Type 2. This interview is still considered good because the angler reported his/her catch.

The question to ask concerning disposition is: "What did you do or do you plan to do with the (species name)?" FIs may have to probe until the ultimate disposition of the fish is determined. For example, disposition code " 3 " should be used if the angler gives the fish to his friend, who is planning to eat it.

The disposition codes can be found below Item 25 on the Intercept Form. They include: (1) Thrown back alive; (3) Eaten - plan to eat; (4) Used/plan to use for bait; (5) Sold/plan to sell; (6) Thrown back dead/plan to throw away; and (7) Some other purpose.

Please limit the use of disposition seven, "some other purpose." It should only be used if the angler's response is unusual and does not fall under dispositions one or three through six. (If using disposition 7, NOAA Fisheries requires that the purpose be documented-so write the angler's response on the form in the comments section.)

Note: There is no code for "given away." If the fish have been given away, ask what the recipient intends to do with the fish and code accordingly. For example, if the fish were given away to a friend to eat, the correct disposition would be " 3 ."

All fish fillets should be considered "unavailable catch" and entered under Item 25. However, if enough of the carcass is left to allow for accurate species identification and an accurate count, the fish can be entered as "available catch" under Item 31.

Anglers may think that fillets are available catch and not report them in response to the question at Item 25. If the FI should look at an angler's catch and discover that all of the fish have been filleted, the fillets must be entered as "Type 2" records, and there would be no "Type 3 " records. FIs should not assume that all fillets would be eaten. Even with fillets, it is important to ask the question concerning disposition.

Each angler must report on his/ her own unavailable catch. If a group of anglers report that they together caught a certain number of fish, and that these fish have been filleted, FIs must determine how many fish each angler caught individually. If the catch cannot be separated by anglers, equally divide the unavailable catch with each contributor in the party. The catch of other anglers in the party is never included in an angler's individual catch. It is important to remember that captains' and mates' catch must not be included here because they are not considered recreational anglers and therefore their catch cannot be recorded in this survey

If one species is disposed of in two or more manners, it will be necessary to complete two or more "Type 2" records for the species. For example, if an angler caught a total of eight bluefish, five of which he/she threw back alive, and three of which he/she plans to eat, FIs should complete two "Type 2" records. The first "Type 2" record would be five bluefish with disposition 1, and the second "Type 2" record would be three bluefish with disposition 3 .

The Coding Manual also contains codes to be used when the species of a fish is unknown. While these cannot be used when inspecting available fish, they may be needed for fish unavailable for inspection (Item 25). These codes are the following:

- Unidentified Catfishes - 163992
- Unidentified Eel - 161123
- Unidentified Flounder or Sole - 172702
- Unidentified Sharks - 159786
- Unidentified Skate or Ray - 160806

Note: Use these codes ONLY as a last resort. FI's should do their best to get a more accurate identification.

Three coding boxes are provided for "Number of Fish" under Item 25. As stated above, this is the number of fish of a specific species-disposition combination caught by an individual angler. Since Item 25 is a key item, there are no "don't know" or "refused" codes reserved for "Number of fish." A number must be entered (" 999 " will be read as nine-hundred and ninety-nine fish).

Five lines have been provided on the Intercept Form for "Type 2" records. If more than five are needed, FIs should use the Extra Fish Form.

Item 26 - Fish caught and kept (harvested) that are available for the FI to look at - All anglers are asked whether they caught any fish in the mode of intercept that the FI can examine and count. If the angler caught some fish that are available for inspection and can be counted, and the fish were harvested (not returned to the water), FIs should code Item 26 as "Yes" and continue with Item 27. This angler must have some data recorded as available catch (Item 31).

Note: Even if an angler allows the FI to identify, count, and/or weigh and measure a fish, but the fish will be released, Item 26 should be coded as " 2 " and no catch should be recorded under Item 31 which refers only to harvested catch.


If the angler did not catch any fish available for inspection, or he/she did not allow the FI to identify or count the catch, code Item 26 as "No," then code Items 27 through 29 as " 8 " ( "Not Applicable"), and continue with Item 30. This angler should not have data recorded as available catch (Item 31) but should have an entry at Item 30.

If the angler caught fish that are available for inspection, but they have already been entered on another angler's form because they could not be separated, code Item 26 as "3-Fish on another angler's form." FIs should then enter the interview number where the fish are located in the boxes provided. Code Items 27 through 29 as " 8 " and continue with Item 30. This angler should have no data recorded as available catch (Item 31) but should have an entry at Item 30.

Note: Item 26 includes the words "to look at." Fish that have been filleted are not considered available "to look at." If it turns out that the angler's fish have all been filleted, FIs will have to go back and change the angler's response to Item 26. Filleted fish are entered as unavailable catch (Item 25), not as available catch (Item 31) unless the rack was available for the FI to see and identify.
*Item 27 - Catch Mixed - This is asked only of those anglers who caught fish available for inspection and whose fish have not been entered on another angler's form. If Item 27 is not applicable, it should be coded as " 8 ."

If the angler caught all of the available fish, code Item 27 as "1-All Caught by Angler," code Items 28 and 29 as " 8 " representing "Not Applicable," and continue with Item 30.

If other anglers have contributed to the available catch, code Item 27 as "2—Other Contributors" and continue with Item 28. All grouped catch should be recorded on the form of the first interview from the party. The catch data is very important and should be recorded as soon as possible when interviewing a fishing party.
*27. Did you catch these yourself or did someone else catch some of them?

| 1 | $\square$ | All Caught by Angler - Code Q28, Q29 as "Not Applicable" |  |
| :--- | :--- | :--- | :--- |
| 2 | $\square$ | Other Contributors | $8 \square$ |
| Not Applicable |  |  |  |

*Item 28 - Separate Catch - This is asked only of those anglers who report that several anglers have contributed to their available catch at Item 27 . If Item 28 is not applicable, it should be coded as " 8 ." Some anglers may be able to partially separate their catch. For example, Moe and Larry catch five fish between them, and Larry says he caught the two smallest plus one more which he cannot point out. Record this on the form as "2-NO" cannot separate, because the angler has to be able to separate all fish, not just some of them. If an angler cannot identify ALL of their individual catch from the group, it should be recorded as a "NO" (2).

If the angler can separate out his/her own available catch, code Item 28 as " 1 -Yes," code Item 29 as " 88 " and continue with Item 30 . Only the angler's own available catch should then be entered as available catch (Item 31).

If the angler cannot separate out his/her own available catch, code Item 28 with " $2-$ No" and continue with Item 29. All of the available catch would then be entered on this angler's form as available catch (Item 31).
*28. Can you separate out your individual catch?

*Item 29 - Number Who Caught Fish - This is asked only of those anglers who cannot separate their individual fish from the total available fish caught by the fishing party ("No" at Item 28). If Item 29 is not applicable, it should be coded as "88."
*29. How many anglers including yourself have their catch here? Please do not include anyone who did not catch fish. Only count those who have their catch here.


The angler is asked to indicate the number of anglers who contributed to the total available catch. Do not include anyone who did not catch any of the available fish. That person should
be interviewed separately if he/she spent any time fishing. The count of contributors should only include anglers who caught one or more of the fish recorded under Item 31 on that angler's form. Captains and mates on charter and headboats are never included as contributors because they are not recreational anglers and therefore their catch cannot be recorded in this survey; however, if their catch cannot be separated from other anglers on the vessel, their catch should still be counted as part of the party lead's grouped catch. As stated above, all of the available catch would then be entered on this angler's form at Item 31.

The following are the five possible ways to code Items 26 through 29:

| IF THE ANGLER SAYS: | CODE AS: |
| :--- | :--- |
| This angler has no available catch. S/he has not | Q26=2 |
| caught any fish that the FI can look at. | Q27 $=8$-Not applicable |
|  | Q28 $=8$-Not applicable |
|  | Q29 $=88-$ Not applicable |
| This angler has available catch. The angler has caught | Q26=1 |
| fish that the FI can look at and count, and the angler | Q27=1 |
| has caught them all. | Q28=8-Not applicable |
|  | Q29=88-Not applicable |
| This angler has available catch. S/he is part of a | Q26=1 |
| group of five anglers who all caught fish. S/he cannot | Q27=2 |
| separate his/her share of the catch. All of the group's | Q28=2 |
| available catch is listed on this angler's form. | Q29=05-Number of anglers who |
|  | caught fish-cannot separate |
| This angler's available catch is part of a group catch. | Q26=3-Record the intercept |
| His/her available catch has been reported on the form | number ("01" in this example) in |
| of an angler in the group who was already | the space provided to indicate |
| intercepted. For example, if the anglers catch was | which form his/her catch is located |
| reported on the first angler in the group who was | on |
| intercepted that day (meaning intercept number | Q27=8-Not applicable |
| "01"), then complete item 26 as shown. | Q28=8-Not applicable |
|  | Q29=88-Not applicable |
| This angler has available catch. S/he is part of a | Q26=1 |
| group. Each angler, though, can separate his/her | Q27=2 |
| share of the catch from that of the group. | Q28=1 |
|  | Q29=88-Not applicable |

If there were four anglers in a boat, and the FI was able to interview all of them, here is an example of how their forms could differ depending on the catch.

Example 1: Angler without Available Catch. This angler did not catch any fish.
*26. Did you catch any fish while you were fishing that I might be able to look at?

2 X No - Code Q27, Q28, Q29 as "Not Applicable"
3 $\square$ Yes, BUT fish on another angler's form - Fill in interview \# where fish are listed
$\square$ Code Q27, Q28, Q29 as "Not Applicable" *27. Did you catch these yourself or did someone else catch some of them?
$\square$ All Caught by Angler - Code Q28, Q29 as "Not Applicable"
2 $\square$ Other Contributors 8 X Not Applicable
*28. Can you separate out your individual catch?
$1 \square$ Yes - Code 29 as "Not Applicable"
$2 \square N$ No
8 X Not Applicable
$1 \square$ All Caught by Angler - Code Q28, Q29 as "Not Applicable"

No
*29. How many anglers including yourself have their catch here? Please do not include anyone who did not catch fish. Only count those who have their catch here.
$\square$
No. of Contributors

88 X
Not Applicable

Example 2: Angler with Available Catch. Angler caught all the fish in his cooler by himself.
*26. Did you catch any fish while you were fishing that I might be able to look at?
1 X Yes
2 $\qquad$ No - Code Q27, Q28, Q29 as "Not Applicable"

3Yes, BUT fish on another angler's form - Fill in interview \# where fish are listed
$\square$ Code Q27, Q28, Q29 as "Not Applicable"
*27. Did you catch these yourself or did someone else catch some of them?
1 X All Caught by Angler - Code Q28, Q29 as "Not Applicable"
2 Other Contributors 8
 Not Applicable

## *28. Can you separate out your individual catch?

$1 \square$ Yes - Code 29 as "Not Applicable"
$2 \square$ No 8 X Not Applicable
*29. How many anglers including yourself have their catch here? Please do not include anyone who did not catch fish. Only count those who have their catch here.

|  |  | No. of <br> Contributors | 88 |
| :--- | :--- | :--- | :--- |

Example 3: Angler with Available Catch, Catch is grouped. This angler has a cooler of fish, and those that are in it belong to him and another angler. They cannot separate which one of them caught which fish.


Example 4: Angler with Available Catch, Catch on Another Angler's Form. This angler caught fish, and they are in the same cooler as the fish from Example 3. He cannot separate out his own catch.
*26. Did you catch any fish while you were fishing that I might be
able to look at?
$1 \square$ Yes
$2 \square$ No - Code Q27, Q28, Q29 as "Not Applicable"
3 X Yes, BUT fish on another angler's form - Fill in interview \# where fish are listed


*29. How many anglers including yourself have their catch here? Please do not include anyone who did not catch fish. Only count those who have their catch here.


It is important to note that the group logic within the abovementioned questions must remain consistent through an entire boat party. For example, if the first angler interviewed from a boat has shared catch amongst only one other angler (Q29=2) with a boat party of four, only one other intercept should have $\mathrm{Q} 26=3$, referencing the first angler. The remaining two anglers should have their own catch or be marked as having no catch.

As mentioned above, FIs may encounter situations in which the captain or mate(s) fished during the charter trip and/or their allocation was counted toward the daily quota. If the catch cannot be separated to the person who caught each fish (either specific individual anglers or crew-person) then the total catch should be recorded as a group catch but only the anglers can be counted as contributors. In other words, fish caught by the captain and/or crew are recorded, but the captain and crew are not counted as contributors to the catch. For example, a party of four anglers chartered a boat with a captain and mate for the day targeting striped bass. The limit in the state they are fishing is two striped bass per person per day. At the end of the trip there was a total of 19 striped bass in the cooler of
the boat (three fish for each of the four anglers, three for the mate and four for the captain). The anglers could not separate out their catch; thus, the party leader's grouped catch would include the 19 striped bass, but only four contributors:

*29. How many anglers including yourself have their catch here? Please do not include anyone who did not catch fish. Only count those who have their catch here.

Check box if vessel has no name AND no registration number. If checked, Q10 (Status) =5.
*31. AVAILABLE CATCH - ASK: May I look at your fish? What do you plan to do with the MAJORITY of the (species)?

| Disposition Codes for Q31 | 5 - Soldiplan to sell |
| :--- | :--- |
| 3 - Eaten/plan to eat | 6 - Plan to throw away |
| 4 - Usediplan to use for bait | 7 - Some other purpose |

$$
\begin{aligned}
& \text { NOTESSCOMMENTS: } \\
& \text { Ceptanin aud mate incladed in catch but not } \\
& \text { contributors. Ang lors in hanry. }
\end{aligned}
$$

TYPE 3 RECORDS: (INDIVIDUAL CATCH AVAILABLE IN WHOLE FORM)

| Species Name | Species Code |  |  |  |  |  | \# of Fish |  |  | Length (mm) |  |  |  | Weight (kg) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. STRIPED BASS | 1 | 6 | 7 | 6 | 8 | 0 | 0 | 1 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | . | 9 | 9 | 3 |
| 2. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

If the commingled fish are not examined (i.e., no available catch recorded on any angler interviews for the party) then each interviewed angler's reported catch should be recorded in the type 2, unavailable fish. In this case, the fish of the captain and crew will not be included because they are not to be interviewed.

Type 3 grouped catch is not allowed in shore fishing modes. Anglers fishing from the shore should be able to separate out their individual catch. Every effort should be made to get each angler to identify their individual catch. If the anglers are unable to separate out the catch, FIs should split the type 3 catch evenly between the anglers who contributed to the total catch.

BOX C - Identify Boat Mode Intercepts - If the angler was fishing from the shore mode, (as indicated in Item 11), Item 30 and Box D should be coded as "Not Applicable."

BOX C. If Q11 is SH mode, code Q30 as "888, " and Code Box D as " 8 ."
*Item 30 - Party Size - This is asked to determine how many anglers fished on the boat, including the angler being interviewed. If the angler fished alone on a boat, code as "001." If the angler was fishing from the shore, code as "Shore Mode."
*30. How many people fished on your boat today?

| $\square$ |  | No. of <br> People |
| :--- | :--- | :--- | $888 \quad \square \quad$ Shore Mode

For this survey, a "fishing party" is defined as a group of anglers who fished on the same boat on the same day. Therefore, all anglers fishing from the same boat are considered members of the same "fishing party" regardless of whether they traveled together to the site. In addition, all anglers fishing from the same boat should be considered members of the same fishing party. The number of people on the boat must be identical for anglers in the same party. If anglers of the same fishing party report a different number of people on the boat, it may be because they do not know the exact number. This may be true especially for HB mode interviews, where the number of anglers fishing on the boat may be high. In this case, clarify the number on the boat by asking the mate or captain, if possible.

Please keep in mind that the number of contributors recorded in Item 29 cannot exceed the number of anglers in a "fishing party."
*Box D - First Person from Boat - This applies to those anglers who fished from a boat and who responded that the number of people on the boat (Item 30) was greater than one. Box D must be coded as " 8 -Not Applicable" if the response to Item 30 is " 001 ," or if the angler was fishing in shore mode (Item 11).

If the angler indicated in Item 30 that he/ she fished together with other anglers on the same boat, then the FI should ask themselves: "Is this the first person on the boat that I have interviewed?" If the response is "yes," code Box D as " 1 -Yes." If he/she is not the first interviewed, code as " $2-\mathrm{No}$ " and record the interview number of the first angler in the party in the boxes provided.

Note: Item 30 and Box D are "key items." Box D contains a question not to be asked of the angler. Rather, it is to be filled in by the FI after the interview is completed.
*BOX D. If response to Q30 is 1, code as "Not Applicable." Otherwise, is this the first angler from this boat that I have interviewed?


Example 1: Single angler fishing from a boat.

| *26. Did you catch any fish while you were fishing that I might be able to look at? |  |
| :---: | :---: |
| 1 | Yes |
| 2 | No - Code Q27, Q28, Q29 as "Not Applicable" |
| 3 | Yes, BUT fish on another angler's form - Fill in interview \# where fish are listed |
|  | Code Q27, Q28, Q29 as "Not Applicable" |
| *27. Did you catch these yourself or did someone else catch some of them? |  |
| 1 | All Caught by Angler - Code Q28, Q29 as "Not Applicable" |
| 2 | Other Contributors 8 X Not Applicable |
| *28. Can you separate out your individual catch? |  |
| 1 | Yes - Code 29 as "Not Applicable" |
| 2 | No 8 X Not Applicable |

*29. How many anglers including yourself have their catch here? Please do not include anyone who did not catch fish. Only count those who have their catch here.


BOX C. If Q11 is SH mode, code Q30 as "888, " and Code Box D as "8."
*30. How many people fished on your boat today?

"BOX D. If response to Q30 is 1, code as "Not Applicable." Otherwise, is this the first angler from this boat that I have interviewed?


Example 2: Angler (Interview \#1) fishing from boat with one or more people onboard first interview.


Example 3: Angler (Interview \#2) fishing from boat with one or more people onboard second interview.

*29. How many anglers including yourself have their catch here? Please do not include anyone who did not catch fish. Only count those who have their catch here.

BOX C. If Q11 is SH mode, code Q30 as "888, " and Code Box D as "8."
*30. How many people fished on your boat today?

*BOX D. If response to Q30 is 1, code as "Not Applicable." Otherwise, is this the first angler from this boat that I have interviewed?

*Box E Vessel On List/ Vessel Name - If Fls complete any CH or HB interview, they must complete Box E.

```
*BOX E: Is this charter/headboat on the Good List? \square Yes \square No Vessel name
Check box if vessel has no name AND no registration number. If checked, Q10 (Status) =5.
```

Refer to the Vessel Goodlist for the state to determine if the vessel from which FIs are intercepting anglers is included on the list (yes or no). In either case, the Fl should write out the full name of the vessel exactly as it appears on the vessel directory, and check either "Yes" or "No" boxes in Box E. If the written name on the vessel does match the name/number of a vessel on the Vessel Goodlist, Box E would be filled in as "Yes" but if the vessel name does not match, to the exact letter and number, it should be listed as "No."

If the vessel does not have a name, use and record other identifying information (state registration number, captain's name and homeport) to try and determine if the vessel is on the list after the assignment is over to answer the yes/no portion of Box E. If a vessel does not have a name or registration information available, an FI cannot determine if the vessel is on the list or not. In this instance, they should mark the check box on the left side of Box $E$ and the interview must be coded as a Status 5 .
*Item 31 - Available Catch (Type 3 Records) - The angler's harvested, available catch should be entered at Item 31 on the Intercept Form. Each line of information recorded is called a "Type 3" record. Each "Type 3" record MUST have the following information:

- Species name (common name, as indicated in the Coding Manual);
- The corresponding six-digit species code (also from the Coding Manual);
- The total number of that species (all counted by the FI); and
- The disposition code (indicating what the angler plans to do with the majority of the fish of that species), valid responses would be those three through nine.
*31. AVAILABLE CATCH - ASK: May I look at your fish? What do you plan to do with the MAJORITY of the (species)?

| Disposition Codes for Q31 | 5 - Sold/plan to sell |
| :--- | :--- |
| 3 - Eaten/plan to eat | 6 - Plan to throw away |
| 4 - Used/plan to use for bait | 7 - Some other purpose |$\quad$|  |
| :--- |



In addition, FIs should strive to obtain weight and length measurements for each fish. If the angler is in somewhat of a hurry, still try to get weight measurements. Last in order of priority, but not to be ignored, is length.

It is also important to note that, while interviewing as many anglers as possible is a major survey priority, FIs should strive to count the number of available fish species for each angler/party before moving on to interview additional anglers. That is, interviewers should verify and count available catch in Type 3 rather than record angler catch estimates in Type 2.

Note: FIs must positively identify and count ALL fish that were recorded under the "available catch" section (Item 31). If the FI are only able to identify and count some of the fish, those that are identified and counted should be recorded under the "available catch" section (Item 31), and those that are not should be recorded under the "unavailable catch" section (Item 25). All common species names should also be written in CAPITAL letters.

Note: Using disposition $\mathbf{1}$ in the Type $\mathbf{3}$ catch is not allowed, even if the FI saw the fish and were able to obtain a length and weight before the fish was thrown back. If the ultimate disposition of the fish is "1-thrown back alive" and not actually harvested, it belongs in the Type 2 or "unavailable catch" section (Item 25). Code Item 26 as "No," code Items 27 through 29 as " 8 " ("Not Applicable") and continue with Item 30.

When more than one fish of a species is available, FIs do not need to repeat the species name, the species code, or the total number of fish on all lines; however, the length, weight, and disposition code must be filled in for every row. In that case leave these rows blank, indicating that the boxes are exactly the same as the ones above (see Example 1 below). Arrows are not to be used to signify repeating rows. If the measured weights and lengths are the same, they must be written out. If lengths and weights cannot be obtained, see below details for how to code missing values. It is also important to note that if neither weight nor length is recorded for a given number of fish, only records with weights/lengths should be provided on lines. For example, if an FI only measured four weights out of nine total Striped Bass, there should only be four lines, with the first line in the "\# of Fish" column written as "009". As with unavailable catch, it is important to write out the full species name (be sure to use the accepted common name). Abbreviations are not acceptable.


If 15 or fewer fish of one species are available, FIs should try to weigh and measure all of them. If more than 15 fish of one species are available, FIs should randomly select 15 fish to be weighed and measured (see Sub-Sampling Procedures on p.60). If there is sufficient time (e.g., there are no other anglers or boats available for interviews), FIs can measure and weigh more than 15 (or even all) of the fish. However, if there are other anglers or boats present with eligible anglers, FIs should limit their measurements and move on to collect subsequent interviews. That is, obtaining interviews should be prioritized over the collection of biological data.

Example 1: An FI is weighing and measuring Type 3 catch at a very busy boat ramp: there are 39 fish of one species in a cooler and the catch is grouped with two anglers contributing to the catch. FIs weigh and measure no more than 30 of those fish ( 15 for each angler) and move on to collect subsequent interviews at the site. Note: if the site had not been very busy, it would have been okay for the FI to measure and weigh the remaining nine fish.

Example 2: An FI is weighing and measuring Type 3 catch: there are 27 scup, seven summer flounder, and two striped bass. The FI has weighed and measured 12 scup, (no summer flounder or striped bass) when the anglers indicate that they want to leave, and only have time to weigh and measure a couple more fish. It is okay and preferred for the FI to stop weighing and measuring the scup and, instead, to obtain weights and lengths on some of the summer flounder and striped bass.

Three coding boxes have been provided for "\# of Fish" in Item 31. As stated in the discussion of Item 25, no codes have been reserved for "don't know" and "refused." A "999" will be read as nine-hundred and ninety-nine fish. Numbers above three digits, that is, above "999," should be written out in the available space.

If a fish has been filleted, but the fish rack is available, do not obtain a length measurement from the rack. The rack should only be used to aid in identification.

If length or weight is missing for all fish of a species, fill in the boxes for the missing data with " 9 ." Missing data should be footnoted with an explanation. Do not add two extra lines with 9's for weights and measures, only one line is needed. Acceptable reasons for not obtaining weight or length measurements include, but are not limited to:

- Angler refused to let FIs weigh or measure his/her fish.
- The fish was gutted.
- The weight exceeded the capacity of the large scale.

If length and/or weight information are missing for some fish of a species (i.e., the angler refused to have the appropriate number weighed and measured), FIs should fill in the available weights and lengths using separate "Type 3 " records. FIs should then use a footnote to explain why some fish were not weighed and measured.

If length and weight information is available for some fish of a species, do not complete extra lines with " 9 " as lengths and weights. For example, if the FI count and identify five black sea bass and obtained weights and lengths for only three of the five fish, complete three Type 3 lines. In this case, the "number of fish" should be listed as "005" even though FIs are only completing three lines. Do not add two extra lines with " 9 " for weights and lengths. If length and weight information are missing on all fish of a species, FIs should only fill out one "Type 3" record for the species. That record would have " 9 " in the length and weight boxes. Again, a reason for the missing data should be written on the form. FIs
should never skip a record line on a coding form. The next fish should be entered on the next line. This means that, in the case that a line needs to be removed, the error should be erased, NOT crossed out, and the correct entry should be entered in its place.

Note: If an angler allows the FI to identify and count his/her catch, but refuses to allow them to weigh/measure the catch, the interview is still good (Status 1) as long as the angler answered all key and non-key items.

The disposition codes for the Type 3 records are listed under Item 31. The question to be asked is: "What do you plan to do with the majority of the (species name)?" Since only one disposition can be used for each species under Item 31, it is important that FIs ask what the angler plans to do with the majority of fish for each species. For example, if an angler has caught three fish of the same species, and he/she intends to sell the largest one and eat the two smaller ones, then FIs should code all records with disposition as "3-Eaten/Plan to eat." This is because the majority of the fish will be eaten. However, each individual disposition must have a disposition code filled in.

When there are equal numbers of fish that have two or more disposition codes, then use the weight to determine the correct disposition code. For example, if there are exactly two fish of one species, one of which will be sold and one of which will be eaten, code to the disposition of the heavier fish.

Fifteen Type 3 records can be entered on each Intercept Form. If more than 15 are needed, use the provided Extra Fish Form. In some instances, several Extra Fish Forms may be needed. In this case, please mark each page as "page 1 of 2, " at the top of each form.

## The Extra Fish Form

## General Instructions

Occasionally, anglers will have more fish than there are spaces on the Intercept Questionnaire. If this occurs, FIs are to use the Extra Fish Forms. This form consists of the heading information (Items 2-9) of the associated Intercept Form with five additional Type 2 rows and 25 additional rows for Available Catch.

## I tem-by-I tem I nstruction

## Items Completed by the FI

Items two through nine are questions to be completed based on information about the assignment and each particular interview-they are not questions that FIs will ask an angler. Items 2-9 should be filled in to exactly mirror the information from the associated Intercept Form.

## Items Asked of the Angler

This part of the Extra Fish Form will be identical to the procedures of the Intercept Form. Please be sure to number the forms and place them in order (but do not staple/paperclip) before sending to the state coordinator. These will be scanned in the order in which they were received.

Item 25 - Unavailable Catch (Type 2 Records) - All anglers are asked to report on fish caught in the mode of intercept that are not available for inspection. Unavailable fish should be entered at Item 25 on the Intercept Form. All common species names should also be written in CAPITAL letters.
*25. UNAVAILABLE CATCH Did you catch any fish that are not here for me to look at? For example, any that you may have thrown back or
used for bait? NOT GROUP CATCH - Only catch from Angler being interviewed.

| Disposition Codes for Q25 |  |  |  |
| :--- | :--- | :--- | :---: |
| 1 - Thrown back alive | $4-$ Used/plan to use for bait |  |  |
| 3 - Eaten/plan to eat | $5-$ Sold/plan to sell | 6 - Thrown back dead/plan to throw away |  |

TYPE 2 RECORDS: (CATCH UNAVAILABLE IN WHOLE FORM; FILLETS ARE UNAVAILABLE CATCH.)


Item 31 - Available Catch (Type $\mathbf{3}$ Records) - The angler's harvested, available catch should be entered at Item 31 on the Intercept Form. Each line of information recorded is called a "Type 3" record. Each "Type 3" record MUST have the following information:

- Species name (common name, as indicated in the Coding Manual - all common species names should also be written in CAPITAL letters) which must have top row of page filled if continuing from the intercept / another extra fish form;
- The corresponding six-digit species code (also from the Coding Manual) which also must have top row of page filled if continuing from the intercept / another extra fish form;
- The total number of that species (all counted by the FI) - should be same number referenced in previous intercept / extra fish forms if referring to same species; and
- The disposition code (indicating what the angler plans to do with the majority of the fish of that species), valid responses would be those three through seven.
*31. AVAILABLE CATCH - COMPLETE TYPE THREE RECORD BY ASKING: May I look at your fish? What do you plan to do with the MAJORITY of the (species)?

|  | DISPOSITION CODES FOR Q31 |  |
| :--- | :--- | :--- |
| 3 - Eaten/plan to eat | $5-$ Sold/plan to sell | 7 - Some other purpose |
| 4 - Used/plan to use for bait | $6-$ Plan to throw away |  |



## Fish I dentification

Field Interviewers should strive to identify all fish (Type 2, 3, and 9) to the species-level; however, Type 3 records must be identified to the species level. In the interest of professionalism, never ask the angler to identify his/her own available catch. For unavailable fish, including fish that have been filleted, ask the angler to identify his/her catch. FIs should be able to use local knowledge to assist the angler in identifying his/her catch. However, FIs should not use their fish identification guide book in order to assist the angler with identification. Do not force an angler to pick a species if they are not sure about the identification. Accepted common names are not necessarily those used by local anglers, and FIs should know how to translate local names into accepted common names. Please refer to the Coding Manual for a complete species list, listed alphabetically. The Coding Manual also contains a list of local names and how they often translate into accepted common names.

As a last resort, if FIs are still unable to identify the exact species of fish, it must be coded as a Type 2 record (under Item 25). Please keep in mind that a fish not identified to the species-level cannot be recorded under Item 31 (which is for Type 3 records only) or on the Discard Form as Type 9. If fish cannot be identified as Type 3 or Type 9 fish to the species-level, make notations on the Intercept Form, including any distinguishing features about the fish-and, if possible, take a picture of the fish. When the interviewing day is completed, or if there is a break in the day when no one is available to interview, contact the state coordinator or other designated point of contact. Explain what level of identification for the fish and provide any distinguishing features. There may be family and genus level codes available for fish where the species level of identification is difficult. Even for Type 2 fish, identify fish as close to the species-level as possible.

Please keep in mind that the species code lists in the Coding Manual are not exhaustive. Occasionally an angler will have a species that does not appear on the list. When this situation occurs, write out the scientific and accepted common name of the species and leave the coding boxes blank. Write a detailed description of the fish, how it was identified, distinguishing characteristics etc. Explain how the species was confirmed. If possible, take a picture of the fish so that the staff fisheries biologists can confirm its identity. If unable to take pictures of a fish, work with the state coordinator to determine the procedures for providing that picture to the staff fisheries biologists. If FIs are unable to clearly identify a fish, use Figure 4.3 to note key characteristics of the fish's anatomy. Examples of this are spots on the caudal peduncle, location of fins, lack of fins, shapes of fins, size of eyes, etc.

## Length Measurements

Fork length is recorded for all fish. Fork length is the length of the fish from the tip of the snout to the fork of the tail (Figure 4.3). Different species of fish have different types of tails and snouts (Figure 4.4).

Figure 4.3: Anatomy of a Fish


Figure 4.4: Measuring Various Fish
The correct procedures for measuring the various types of fish found on the Atlantic Coast are as follows:

Sharks are measure from the tops of the snout to the center of the tail fork.


Skates and rays are measured from the tip of the snout to the distal end of the pelvic fins. Do not include claspers.


Swordfish and billfish are measured from the tip of the lower jaw to the center of the fork of the tail.


Black sea bass are measured from the tip of the snout to the centerline of the tail. Although this is neither the longest, nor the shortest length measurement, it is the most consistent.


All other species are measured from the anterior tip of the longest jaw to the tail. This procedure is the same whether the tail is forked (e.g., bluefish) or protrudes out (e.g., flounders). The resulting length is therefore a fork length. Refer to examples below.


Fish lengths must be taken using a measuring board and recorded to the nearest millimeter. The survey measuring boards are labeled in centimeters. To determine millimeters, multiply the centimeter reading by 10, and add the number of smaller markings past the centimeter marking. If it is difficult to read and interpret the measurements on the board, contact the state coordinator immediately for clarification. For example, a fish that measures to the first line past " 23 " is " 231 " millimeters. Since four coding boxes are provided for the length measurement, the length of this fish should be coded as " 0231 ." Never round lengths to the nearest centimeter or half centimeter. Rounding fish measurements will introduce a "digit bias."

FIs are also issued a tape measure to be used in addition to the measuring board. A fish that exceeds the length of the measuring board should be placed on the measuring board using the same procedure as explained above. The tape measure should be placed UNDER the board, being sure that the edge of the tape measure is flush with the end of the board. Measurements are read to the nearest millimeter on the tape measure. At no time should the tape measure be held above a fish; this will result in an inaccurate length measurement if the tape measure bends to the contour of the fish's body.

## Weight Measurements

Each state will provide two scales to FIs - large scale (maximum weight of 12.5 kg ) and a small one (maximum weight of 2.0 kg ). The larger scale should only be used for fish weighing more than the weight capacity of the smaller scale. Fish weights have to be recorded to the nearest five one-hundredth (0.05) of a kilogram when the smaller scale is used, and the nearest tenth (0.10) of a kilogram when the larger scale is used. Five boxes have been provided for the coding of weight: three to the left of the decimal, and two to the right of the decimal. For example, a fish weighing 4.4 kilograms on the larger scale should be coded as "004.40," and a fish weighing 0.15 kilograms on the smaller, more precise scale should be coded as "000.15." In the case of fish weighing less than 0.05 kg , the length should be recorded but the weight should be written as "999.99."

Weight measurements should be given priority over length measurements when time is limited. However, weights should never be taken at sea on a headboat trip.

When weighing fish, always take readings from the metric side in kilograms-not in pounds. If an angler wants to know the weight of his/her fish, record the weight in kilograms on the data sheets first. After FIs have completed the interview, they can then weigh fish for the angler in pounds.

## Calibration and Use of Chatillon Scales

While scales should be calibrated at least once or twice a year using a set of certified standard weights, FIs should also prepare for every assignment by ensuring that the scales are zeroed properly. Most instances of improper zeroing result in rather small errors of between 0.1 to 0.2 kg . This amount may seem insignificant, but when catch estimates are expanded from raw data, these "small" errors can cause a large, undesirable weight bias. For example, suppose an FI frequently encounters a small species of fish which rarely exceeds weights of 0.2 kg . If a scale is not set properly, and reads 0.1 kg light, the FI would be under-reporting the biomass of those fish by as much as one-half the actual value. Of course, the more out of adjustment the scale, the more significant the error becomes. It is important that FIs realize that even apparently minute maladjustments can cause bias.
Figure 4.5 shows how to properly zero Chatillon spring scales.
Figure 4.5: Zeroing Chatillon Scales


The following rules apply to using scale while in the field:

- Always carry both scales ( 2.0 kg and 12.5 kg ) since Fls never know the size of the fish that will be encountered.
- The 2.0 kg scales have graduations of 0.05 kilograms. Readings should be taken to the nearest 0.05 kilograms (e.g., $0.20 \mathrm{~kg}, 0.25 \mathrm{~kg}, 1.35 \mathrm{~kg}, 1.40 \mathrm{~kg}$, etc.).
- The 12.5 kg scales have graduations of 0.10 kilograms. Readings should be taken to the nearest 0.10 kilograms (e.g., $4.10 \mathrm{~kg}, 5.70 \mathrm{~kg}, 9.00 \mathrm{~kg}$, etc.).
- Always make sure the scale reading is set at zero before weighing any fish. If the scale is not zeroed, do so by adjusting the calibration (zeroing) screw (see above image) at the top of the scale. If the scale cannot accurately zero, it may be defective.
- If at any time the Chatillon spring scale is not functioning properly, contact the state coordinator immediately.


## Care of the Chatillon Scales

FIs are expected to take good care of the scales. These scales are expensive, and it is critical to the success of this survey that all FIs have accurate scales every time they are in the field. Please call the state coordinator if there are any questions concerning the required care techniques listed below:

- Keep scales protected in sealed, dry, clean zip-lock bags when not in use.
- Never store scales by hanging them from the weighing hook as this will stretch the spring.
- Avoid contact with saltwater if possible, and never leave scales in a puddle or bucket of water. If scales are exposed to saltwater, rinse with freshwater, and allow them to dry thoroughly before storing in the zip-lock bag.
- Always make sure scale reading is set at zero before weighing any fish. If a scale is not zeroed, do so by adjusting the calibration screw at the top of the scale. If FIs cannot adequately zero the scale, it may be defective.
- Scales should be sprayed with any all-purpose, anti-corrosive grease (e.g., WD40) for extra protection. This should be repeated every day the scales are used. It is a cheap investment that will prolong the life of the scales.


## Sub-Sampling Procedure

When an angler has more than 15 fish of the same species available for inspection, a subsample of 15 fish must be selected for weight and length measurements. Fls should utilize a "simple random" method of sampling an angler's catch. That is, while measuring 15 individual fish of one particular species, FIs should randomly pick 15 of these from the angler's total catch of that specified species and measure/weigh these. As an FI progresses through the anglers catch, the next available fish should be the one which is measured and weighed. There should be no planned sampling (i.e., largest, smallest, next largest, next smallest, average-sized, etc.) sampling of the angler's catch. An easy way to accomplish this is to first count all the fish by placing them within a container. Then, as the fish are being put into the ice chest, the FI should randomly select 15of these fish.

Note: All missing length and weight measurements should be footnoted and explained on the questionnaire.

## Completing, Reviewing, and Editing Forms

The 2018 APAIS will utilize Optical Character Recognition (OCR) scanning technology to convert these written forms into an electronic database. Because of the scanner's sensitivity to properly written letters and numbers, interviews must be sure to follow standardized data entry.

Correct:


The way in which these numbers are written represent the only way field interviewers should be entering data. This means that numbers such as $6,8,9$, and 0 need to have completely closed loops; otherwise, the OCR will not recognize the entry. The following represent incorrect entry of numbers:

## I ncorrect:



Additionally, it is VERY important that staff write all letters and numbers within the boxes. OCR software can only read what is within the box, anything outside will be ignored, misread, or worse, included in a separate field's box. As an example one of the more common data edits observed, below is " 2 " written correctly (left), incorrectly (center), and as OCR will see the incorrectly written " 2 " within the box (right). This will cause OCR to read the " 2 " like a " 7 ":


Additionally, it is imperative that FIs refrain from writing the common name of fish in cursive. The OCR will match each written entry with a pre-determined term from a database of known species, states, and counties. Only standard print writing is to be used by FIs. Regardless of the mode of intercept, it is essential for FIs to deliver accurate, legible, and complete forms promptly to the state coordinator. If forms are completely illegible, please provide the state coordinator with the original form attached via paperclip to a clean, recopied form with a note of explanation in the ASF. In order to achieve the best possible forms, all field staff are encouraged to review all completed forms during any
downtime FIs may have during the assignment. It is best to review forms early because the interview will have occurred recently.

After the assignment is completed, FIs should spend a few minutes editing forms prior to sending them into the state coordinator. The purpose of editing is to find and correct errors, as applicable, and to make sure the form is complete and legible. FIs should never change any data; editing is simply meant to ensure accuracy and completeness. While reviewing and editing, FIs should be looking for simple mistakes, such as blank questions, boxes being filled in appropriately, skip logic is being followed, and so on. Make sure that notes have been provided as needed and that all items are legible (i.e., upper case only, written exactly within boxes, standard numerals, etc.) for the scanner. Editing for legible and correct character recognition is acceptable but is expected to be minimal if guidelines for form entry are followed. Quality data in the field is essential to the success of this study. Copying and/or transcribing forms in order to provide neater data is prohibited. However, if the forms absolutely cannot be read or were damaged to the point where they would not scan, FIs can provide a new, clean copy of the form but must also provide the original form to the ACCSP.

Once reviewed and edited, all forms should be assembled for submission to the state coordinator. In addition to shipping paperwork, some states will also require that FIs report activities to state coordinators on a weekly basis. This documentation of field work is meant to keep state coordinators and the ACCSP sufficiently aware of weekly work activity, but also for the ACCSP to be able to deliver weekly production tallies to NOAA Fisheries. All paperwork will be due to the ACCSP by the following Friday at noon (1200); however, states will vary in the deadline for form submissions.

## Assignment Summary Form

An Assignment Summary Form (ASF) must be completed for every assignment whether or not interviews or any counts are obtained. As with all forms, it is important that FIs write as legibly as possible since the entered data on these forms will be scanned in and reviewed by state coordinators as well as data entry staff.

## Item-By-I tem Instruction

The ASF form summarizes the assignment by detailing what occurred for all sites that encompass the assignment, whether it is a one or two site cluster. It is important that the information on all the different forms matches up with the ASF; for example, if two different sites are visited to complete the assignment, both site codes should be listed on the ASF. Also, time spent on site should match between the ASF and the corresponding intercepts. Additionally, the number of interviews listed on the ASF must match the number of intercept questionnaires returned with that assignment.

An important survey rule is that anglers should never be double counted (Appendix D). In other words, each angler should be represented only once on the ASF. An angler fishing along the shore who is included in the "Not Done" column should not be included as a confirmed count. Initial refusals should be recorded only as an "Initial Refusal" and cannot be included anywhere else. Similarly, an angler listed in the "Angler Trips Counted" column should not be represented in any other part of the ASF.

Most pertinent information on the ASF regarding the site can be found directly on the assignment list provided to the FI by the state coordinator. FIs will be entering:

- Interviewer Name - validate that FIs completed the assignment.
- Interviewer ID Number - for the FI and $2^{\text {nd }}$ interviewer if a night assignment. If FIs are working the assignment alone they will put their ID number under $1^{\text {st }}$ Interviewer ID. If a second FI is working a night assignment, the four digit ID for that FI should also be included on the ASF. Please discuss with the state coordinator who the $1^{\text {st }}$ and $2^{\text {nd }}$ FIs are. Only ONE ASF is completed per assignment. The person designated as the $2^{\text {nd }} \mathrm{FI}$ should not return an ASF to their state coordinator, but their data will be included in the submitted set of forms.
- Date - enter the month and day in which the assignment was completed.
- Site Group - identify which site group the assignment was drawn from.
- State - identify two digit state code.
- County - identify three digit county code.
- Control Number - enter the seven-digit number.
- Notes - document on-site activity.
- Assignment Interval - pre-determined by the assignment draw.
- Cluster ID - enter the seven-digit number.
- Site ID - enter the four-digit number for each individual site visited on the assignment. If the FI only visited one site the remaining row can be left blank.
- Tournament Weigh Station - enter " 1 " if any of the sites were a fishing tournament weigh station and a " 2 " if not. This refers to an active weigh station during an active fishing tournament ONLY, not whether or not a site has a weigh station on its premises.

All other information that will be added to the form is to be based on activity at the assignment.

At the very top of the ASF form, FIs will write in their name to verify who completed the assignment.

INTERVIEWER NAME: $\qquad$
Starting in the top left hand side of the form, begin entering information. First, the ASSIGNMENT NO. Box is a pre-filled box that will always display a number one. Only a single assignment can be completed per day.

Below the Interviewer ID boxes enter the DATE: MM/DD in which the assignment was completed. The current year will be hard-coded on the form. FIs should enter a two-digit number for the month, followed by a two-digit number for the day of the month when the assignment was completed. Do not use any forms with a date other than "2018"forms may look similar, but changes may have been made. All forms from previous years should be discarded.


Document the SITE GROUP of the assignment. FIs should enter the appropriate one-digit number for the assigned site group. Each site group is given its own numerical identifier:

- "1" for Shore (SH) site group,
- " 3 " for Private Rental (PR) site group,
- " 5 " for Charter ( CH ) site group, and
- " 6 " for Headboat (HB) site group.

FIs also need to make sure to fill in the STATE by entering the two-digit state code for the state in which the assignment was completed. This is the numerical code that is assigned to each state. The state codes are as follows:

| State | Code |
| :--- | :---: |
| Connecticut | 09 |
| Delaware | 10 |
| Georgia | 13 |
| Maine | 23 |
| Maryland | 24 |
| Massachusetts | 25 |
| New J ersey | 34 |
| New York | 36 |
| North Carolina | 37 |
| Rhode Island | 44 |
| South Carolina | 45 |
| Virginia | 51 |

When entering COUNTY, use the three-digit county code for the county where the first assigned site was located. FIs will be able to find this in their assignment draw record (Assignment Tracking Application) as well as the provided Coding Manual. All sites within a cluster will always be in the same county.

The CONTROL NUMBER is a very important piece of information that is easily confused with the cluster ID. Enter the appropriate seven-digit control number for the assignment. This number is provided on the list of assignments distributed by the state coordinator. Each assignment is provided with its own unique control number.


The ASSI GNMENT I NTERVAL is predetermined by the assignment. Enter the assigned numerical code for the time interval of the assignment. There are five standard time intervals to report.

ASSIGNMENT INTERVAL: 1=0200-0800, 2=0800-
$1400,3=1400-2000,4=2000-0200,5=1100-1700$
Time intervals will only be recorded for either SH, CH, or PR site groups. There should be no time interval for HB assignments since they may actually fall outside these time blocks.

If an interviewer working on another survey (e.g., Large Pelagic Survey (LPS)) is present during the site assignment, it shall be documented on the ASF in the ENCOUNTERED ANOTHER INTERVI EWER section. In the case of an FI encountering an interviewer from the LPS, it is permissible to work side-by-side with the interviewer if can be done constructively; however, if successfully interviewing anglers becomes burdensome, APAIS interviewers take priority. LPS interviewers are aware of this and will move to a different site if necessary. FIs will enter either a " 1 " for "Yes" if they did encounter another interviewer or " 2 " for "No" if they did not encounter another interviewer. Please provide a comment on the ASF about the interaction, and include the survey that the other FI was working on. Other APAIS interviewers do not qualify for this question. Only other unrelated interviewers should be noted on the ASF (i.e., never someone working on the APAIS).

ENCOUNTERED ANOTHER INTERVIEWER:


If working a HB assignment, fill out the IF SITE GROUP=6 BOX - Fill in the name of the headboat which was ridden exactly as it appears on the vessel. Next, record the total number of hours on the headboat, from the time it left the dock until it returned to the dock, to the nearest 0.25 hours ( 15 minutes $=0.25$ hours). If working SH, CH, or PR site groups, leave the box blank and skip to the next question.


The series of boxes that are labeled START TI ME and STOP TI ME are the ON-SITE RECORD - this section of the form records the start and stop times, recorded in four digit military time, for time spent at each site during the course of the assignment. Always identify each site by entering the appropriate code number in the boxes under the SITE heading. Sites must be visited in the order they were assigned. The first start time entered should match the beginning of the assigned time interval and the last stop time should match the end of the assigned interval.


For HB assignments, record the start time as the beginning of sampling on site and the stop time as the end of interviewing at the site. The headboat dock-to-dock hours should have been documented in the IFSITE GROUP=6 box.

The end of the boxes in the middle of the form are for ANGLER TRIPS COUNTED (NOT I NTERVIEWED) - Counted angler trips are the number of individual, eligible anglers that were witnessed completing their fishing and leaving the site. Be sure to correctly add up all of the counts in the TOTALS fields on the bottom of this section. Remember: do not include interviewed anglers in the completed ANGLER TRIPS COUNTED section.

To help keep accurate counts for various instances, tally boxes have been provided to help keep track of Not-Rec/Not-Salt/Not-Fin anglers, Initial Refusals, Language Barriers, and Counted tallies as well as completed SH/CH/PR interviews. These fields are not required to be used, but is available to help FIs stay organized while onsite.

TALLY BOX

| SITE | Not Rec | Not Salt | Not Fin | Initial Refusal | Language Barrier | COUNTED |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1ST |  |  |  |  |  |  |
| 2ND |  |  |  |  |  |  |



On the bottom left hand corner of the ASF, note the CLUSTER ID and the $\mathbf{1}^{\text {st }}$ SITE/ $\mathbf{2}^{\text {nd }}$ SITE for each individual site (four-digit number) visited on the assignment. If only one site was visited, the remaining row can be left blank. In addition, if any of sites were a

TOURNAMENT WEI GHT STATION, please record a " 1 " in the provided column if there is an ongoing, active tournament with an active tournament weighing station at the site during the assignment interval. If not, a " 2 " should be filled in, whether or not there is a permanent weight station on site.


After all intercepts are completed for an assignment, tally them on the ASF based on their INTERVIEW STATUS. The "COMPLETE" section represents the number of good (status 1 "Questionnaire Complete" and status 2 "Refused Non-Key Item") interviews obtained for the assignment. The other status interviews section represents the number of "Initial Refusal", "Language Barrier", and "Refused Key Question" anglers encountered.
"I nitial Refusal (Status 3)" - this code should be used if an eligible angler refuses to be interviewed. Anglers who refuse to be interviewed will usually claim that they do not have time to participate; however, FIs should always attempt to determine eligibility. If an angler is eligible, but refuses to be interviewed, record this angler on the ASF under column "Initial Refusal". Any eligible angler who is not interviewed from a private, charter, or headboat where at least one intercept was obtained must also be tallied as an initial refusal (e.g. if anglers from a boat party walk away while one angler is being interviewed, those party members are to be coded as refusals, however in such a case the skill of the FI should be used to coerce those anglers to remain and be interviewed). No Intercept Form is required for that angler.

This code should also be used for any missed interviews of anglers that were members of a boating party in which one or more interviews were obtained. For example, a charter boat comes back to dock with five anglers who are done fishing for the day. FIs are able to get two good interviews from the party, but the other three members of the group walk away without giving a full interview. Those three anglers would be considered initial refusals and should NOT be included in the angler trips counted.
"Language Barrier (Status 4)" - this code should be used if the angler approached for an interview cannot respond to the interview in English and no other person is willing or able to translate. Such anglers include non-English speaking anglers and deaf anglers. Conducting the interview in a language other than English is not allowed. However, the use of a proxy interpreter for the angler is acceptable. If either of these methods is used, please note it on the form next to the name and phone number. If it is not possible to complete the interview with an eligible angler due to a language barrier, record this angler in the "Language Barrier" count under I NTERVIEW STATUS on the ASF. No Intercept Form is required for this angler. It should be assumed that anglers who cannot be communicated with are eligible unless information exists that indicates that the angler is not eligible.

[^2]

There are several situations which will result in "I NELIGIBLE" anglers. This represents individuals who were not eligible for the survey, or who were eligible but were not interviewed. Ineligible anglers fall into several categories:

- "Not Done" - SHORE MODE ONLY - FIs should enter the number of anglers actively fishing at the site in shore fishing mode when leaving the site. Remaining anglers who have informed the FI that they will not be done fishing in shore fishing mode before the end of the assignment will be recorded as "Not Done" at the end of the assigned interval. Beach/bank anglers are eligible for incomplete trip interviews, but shore mode anglers fishing from man-made structure (pier, jetty, dock, etc.) are not. Anglers fishing from man-made structures that leave the FI's current site in order to continue fishing from another site should not be tallied in any location. This is due to the possibility of an angler being counted at two different sites during a single waking day of fishing in that mode, thus duplicating counts of eligible anglers. Trailers in the parking lot cannot be confirmed as recreational fin fishing and should never be counted.

The other "ineligible" categories include those approached but found to be ineligible because of responses to questions in the screening introduction. Please be sure to understand what should and should not be included in these categories. Only include anglers who are not eligible for the survey (i.e., those who were commercial fishing or targeted shellfish). Do NOT include sunbathers, swimmers, boaters, etc.

- "Not Rec" = Not Recreational: Commercial anglers or anglers whose primary purpose of the trip is to provide income.
- "Not Salt" = Not Saltwater: Recreational anglers fishing in freshwater.
- "Not Fin" = Not Fin Fishing: Saltwater recreational anglers who did not target and catch any finfish. For example, individuals targeting crabs or other shellfish who did not spend time targeting finfish or incidentally catch finfish would be recorded here.
- "Not U.S." = Not U.S. Waters: Recreational anglers who were not fishing in United States water. This category has nothing to do with U.S. citizenship, only where the angler is fishing and mainly applies to anglers in Maine fishing in Canadian waters.


The right side of the ASF form has a section labeled COMMENTS. Use the comments section to communicate any additional information about the assignment. More comments means more clarification for the state coordinator.

The final section on the ASF is labeled REASON FOR LEAVI NG SITE - If there is any reason that the assignment cannot be completed at the designated sites at the designated times, provide a reason code as to why and any additional information in the comment section. Each line of the REASON FOR LEAVI NG SITE section corresponds to first and second site. For example, if the second site was closed upon arrival, provide code 12 (Site closed, after hours) and provide the times the site is open in the "COMMENTS" section. In general, the FI should leave the site at the end of sampling time. Therefore, code 11 (End of sampling time) should be recorded on the vast majority of forms. This should be the default code for all completed assignments. Any other reason code should have an explanation listed in the comments section above. It is never permissible for an FI to leave the site due to lack of activity at an assigned site.

|  |  | REASON FOR <br> LEAVING SITE <br> (use codes listed above) |
| :---: | :---: | :---: |
| REASON FOR LEAVING SITE CODES: |  |  |
| 06 - Could not find site | 12 - Site closed, after hours (time in comments) |  |
| 08 - Asked to leave | 13 - Site closed, other (specify in comments) |  |
| 11 - End of sampling time | 14 - Site unsafe during sample period |  |

## Potential Problems

## Hostile Respondents

In working with the public, FIs may encounter some hostility, either from the anglers being interviewed or from marina owners and charter captains. This behavior is rare; however, NOAA Fisheries offers some general guidelines for how to respond and how not to respond when encountering hostility. The following points should be remembered when dealing with hostility:

- Do not take a hostile attitude personally unless the comments are directed towards an FI personally. In this case, the FI should terminate the conversation and walk away. Additionally, any hostile interaction with a site operator should be reported to the state coordinator immediately. From here, the state coordinator must then report the hostility to ACCSP and NOAA Fisheries immediately.
- Misconduct, threatening conduct, ejection of an FI from a site, or refusal to allow interviewing needs to be dealt with as soon as possible following any negative interaction with FIs. This must be communicated to the state coordinator in order to resolve issues and to minimize the impact on future sampling at the site.
- Be aware that if an FI engages expecting hostility, then they may cause it.
- Be aware of body language and pay attention to that of others.
- Do not engage in heated discussions.
- Do not be accusatory or defensive.
- Never tolerate foul language and do not use it (say, "have a nice day" and immediately walk away).
- If anyone threatens bodily harm, leave the premises immediately and provide documentation to the state coordinator; the information will be forwarded to NOAA Fisheries.
- Call the police if necessary or if believed to be in danger of any kind.

Above all, remember that FIs play no role in enforcement and have nothing to do with any limits, rules, or regulations. Hearing that can change the viewpoint of an angry respondent, and they will most likely realize that FIs are not the enemy.

## Frequently Asked Questions/ Comments

There are common questions that are asked of APAIS FIs. Listed below are some common questions that FIs may hear in the field regarding this study accompanied by responses. FIs should study the responses and become familiar with the study to accurately respond to questions from respondents.

## 1. Who is conducting the survey?

"This study is being conducted by the state of [INTERVIEWING STATE] and the ACCSP on behalf of the National Marine Fisheries Service." It is important that FIs are clear that they work for their individual state and not for NOAA Fisheries.

## 2. What is the Atlantic Coastal Cooperative Statistics Program?

"The Atlantic Coastal Cooperative Statistics Program (ACCSP) is a cooperative state-federal program of the Atlantic United States and the District of Columbia."

## 3. What is the study about?

"The survey gathers information from marine recreational anglers regarding their catch, participation, and effort in marine recreational fishing."

## 4. What kinds of questions are you going to ask?

"You'll be asked questions about your fishing trip today and where you are from."

## 5. Do I have to answer this/ answer your questions?

"Although you are not legally required to answer our questions, your input and opinions are very important to the success of this study. Your experiences are important to ensuring that the results of this study are accurate and to assist in the development of policies and procedures created by the National Marine Fisheries Service."

## 6. Can I refuse to answer [question just asked by FI]?

"You may refuse to answer any question at any time, but remember that your responses are kept confidential. The collected data are never linked to contact information (e.g., name and phone number); however, individual trip responses are public data."

Note: If the angler refuses a key question on the Intercept Form, the FI should thank the angler for their time and terminate the interview.

## 7. I'm not interested!

"Your participation would be greatly appreciated. It is very important that your unique experiences and perceptions are captured. The State fisheries office and National Marine

Fisheries Service need your information to help develop policies and procedures regarding marine recreational fishing. Let's get started and you can see what the questions are like."

## 8. Why (or how) was I selected for this study?

"You were selected from among the eligible anglers at this site. Your experiences are unique and important to the study." "This fishing site was selected and all anglers who meet certain criteria, and are finished fishing for the day, are eligible for participation."

## 9. Why should I participate?

"You represent thousands of other people that have similar experiences regarding marine recreational fishing along the east coast. The State fisheries agency and National Marine Fisheries Service needs your information and experiences to help develop policies and procedures regarding marine recreational fishing. Your help is voluntary; you do not have to answer any questions that you do not want to."

## 10. I'm too busy now!

"Please know that you are very important to this study. Your experiences represent those of many others and will help shape public policy. If you would like, we could start with a few questions now to see how far we get."

## 11. How do I know this remains confidential?

"I can assure you that all information that we obtain from you will be kept confidential to the extent allowed by the law. The answers you give will be combined with those from other anglers, and the results will be reported in percentages, averages, and other statistics that describe the group, not the individual. All project staff members and Field Interviewers have signed Statements of Nondisclosure and are prohibited by law from using the information. Any other use is a violation of Federal Law and is subject to heavy fines and imprisonment."

## 12. How long will this survey take?

"That will depend on your fishing activity today. Most interviews take a few minutes. Let's get started and see how it goes".

## 13. How do I know this study is legitimate? Where do I get more information?

"You may contact my supervisor at [state coordinator Phone Number/Email] to verify the legitimacy of the study or to obtain additional information."

Note: If this question is asked by an angler, the FI should give them the "To Whom" letter. Additionally, this letter can be distributed to anyone asking the FI about what they are doing (e.g., boat captains, site operators, general public, etc.).

## 14. I didn't catch anything today.

"That's perfectly fine. We are interested in learning about your fishing activities and experiences during your trip. That information is just as crucial."

## 5. HEADBOAT ASSI GNMENTS

## Scheduling and Rescheduling Headboat Assignments

Each headboat (HB) assignment specifies a vessel and a date. HB assignments should be completed on the scheduled day; however, there are many circumstances that may prevent FIs from being able to do so. Unlike site-based assignments, HB assignments may be rescheduled. The highest control numbers of each day type (weekend / weekday) in each month should be completed only if all other control numbers have already been completed. The priority for rescheduling HB assignments is to reschedule the same vessel, at the same site, on the same day type. This means that if the FI arrives on site and the scheduled vessel is not running, it may be appropriate to wait for another day wherein that vessel will go out. However, if this is not possible, FIs should contact their state coordinator in order to discuss the best possible process for that particular situation. In the case that the assigned vessel cannot be ridden, a vessel of similar size, located at the same site can be used instead. In this situation, the vessel must have been drawn in that month's HB draw. Taking an alternative vessel should be the last resort.

Upon receiving HB assignments for the month, FIs should check to see if the boat takes reservations and call the contact number for the assigned boat to reserve a spot for the assigned date (talk to the state coordinator in order to receive this information). When making the reservation, inform the contact person about the survey. Also probe for the number of reservations already made in order to maximize the probability the boat will make that trip, barring poor weather or other unforeseen circumstances. If the particular boat trip has already reached (or is expected to reach) maximum passenger capacity (as defined by the Coast Guard), attempt to reschedule with the same boat for the next appropriate trip (matching the assigned kind of day, weekday or weekend, assignment). Under no circumstances should the FI's presence cause the boat to exceed the boat's Coast Guard capacity. On larger headboats, two FIs may be conducting interviews on the same vessel at the same time. In doing so, FIs must coordinate in order to make sure that no anglers are shared between the two conducting independent interviews. However, FIs will use only one ASF for the assigned headboat trip. While both FIs will fill out individual Intercept Forms, Extra Fish Forms, and Discard Forms, the primary interviewer will fill out the ASF with both interviewers' totals. However, only the primary interviewer ID number should be recorded amongst ALL Intercept Forms. The second interviewer ID number will be recorded on the ASF but this will serve as the only record of the second interviewer.

If the boat does not take reservations, FIs can still call ahead to alert the captain to the study and what they will be doing while on board. Or, the FI can arrive early, find the captain, and request permission to sample the trip, explaining the purpose of the survey, prior to departure from the dock. The FI cannot simply board the headboat and then notify the captain after the trip is under way.

If the boat is taking more than one trip on the assigned day, randomly select one of the trips scheduled for the assigned day. For example, if the boat is taking two half-day trips, flip a coin to choose the first or second trip of the day. In general, avoid always riding headboats during the same time of day (e.g., always taking morning trips). This approach could bias the data collected by over-representing certain species that are more prevalent during certain times of the day.

FIs should always call ahead to confirm whether the headboat is departing as scheduled, especially if the weather is questionable. If, when arriving onsite, the scheduled vessel is cancelled, another boat at that same site may be boarded to replace the original vessel
trip. However, if there are no other headboats available for sampling on the assigned date at that site, then the FI may attempt to sample another HB trip at the next nearest site. Be sure to contact the state coordinator if the scheduled trip does not sail on the scheduled day.

It is important to understand that any rescheduled vessel needs to be completed within the same month that its original complete date was scheduled for. Therefore, it is imperative that FIs try not to reschedule early HB assignments for later in the month. The chances a boat will not run due to the low number of paying customers is as unpredictable as the weather. HB assignments must be completed on the same day type. That is, a weekend assignment (Saturday, Sunday, or Holiday) should be rescheduled to a different weekend day and a weekday assignment (Monday - Friday) should be rescheduled to a different weekday.

Do not complete an ASF if the assignment was not successfully completed (i.e., if FIs were not able to ride the boat). If FIs are unable to complete the assignment for other reasons, please contact the state coordinator so that the assignment may be rescheduled, or issued to another FI.

## Riding the Assigned Vessel

A HB assignment requires that FIs ride a specifically drawn, assigned for-hire boat. By utilizing a directory of vessels in the Fl 's state, determine the location of departure for the assigned boat. Because we are in a continuous process of updating each state's vessel directory, it is possible that a HB assignment may list "9999" in place of an Intercept site code. In this case, the FI can help in determining whether the vessel leaves from an existing Intercept site, or if the departure site is a new Intercept site. If the boat departs from a site listed on the Site Register, please note this site number, the name of the boat, and a comment to review or update the vessel directory to reflect this new information on the ASF. When unsure if the departure site is an existing intercept site, please contact the state coordinator as soon as possible.

## Headboat Assignment Time

On-site time is defined as the time spent between arriving at the departure site and leaving the departure site to return home. For example, if the FI arrives at 0730 for a departure at 0800, the assignment's start time would be 0730. FIs will also record the vessels 'Dock-toDock' time as the entire time the headboat spends at sea, away from the dock on the ASF. FIs should make sure to be at the site in plenty of time to board the boat and introduce themselves to the captain and crew.

## Sampling Anglers for the Intercept Interview

During a HB assignment, when an FI has boarded a headboat, there is no limit to the number of completed interviews that may be obtained. However, the goal is to get as many good interviews as possible while maintaining good quality. It may not be possible to interview every angler on the boat, so FIs must select a reasonable subsample of anglers to monitor and interview. This number will depend on the length of the trip and the target species for the trip. It is very important to obtain information on discarded catch during a HB assignment. In fact, it is more important to collect complete information from fewer anglers than to collect incomplete information from a greater number of anglers. It is understandable that an FI's first HB assignment will have a lower number of completed intercepts. However, the more comfortable an FI becomes at completing these assignments, the more intercepts can be completed. If at any point FIs do not feel comfortable doing HB
assignments, it is important that FIs relay that information to the state coordinator. A more experienced FI can go out on the boat with the FI to provide pointers. Headboats are not for everyone. If FIs find that they are unable to be stable on the boat, get sick easily, or can't keep up with the fast pace of a headboat catch, then allow the state coordinator to concentrate the FI's skills in other modes.

Procedures on the headboat will be determined by many factors, including the number of eligible anglers, type of fish targeted, and distance traveled from shore. While on board, determine a reasonable number of interviews to conduct and choose a sub-sample of anglers to interview from the total number fishing on the boat. One way to do this is for FIs to station themselves in a suitable spot on the boat and monitor and interview each angler that can be seen from that spot.

FIs should use their best judgment to determine the number of anglers to interview on a HB assignment, given the specifics of the trip. In most cases, an FI working alone should attempt to interview 10 to 30 anglers.

Under no conditions should FIs just select the more friendly or cooperative anglers. The anglers chosen by FIs must be representative of the entire group.

## The Trip Out: Collect Partial I nterviews

Canvassing introductions should begin as soon as the boat leaves the dock, and continue until all the anglers are aware of the survey. If necessary, select a sample of anglers to interview. FIs should begin the interview with questions 17-24 for the anglers on board since each angler's name will be on his/her form, FIs can go back to each angler and get the remaining information once fishing is completed. It may be helpful to write down a descriptive phrase on each intercept about each angler to help FIs keep track of who is who, such as "Yankees cap", "purple tennis shoes", etc. FIs should explain to the anglers that they will be observing and identifying the discarded catch of some anglers selected for the interview (while the anglers are fishing)-and identifying and measuring the harvested catch for all anglers selected for the interview (after they have finished fishing). Never weigh discards or available catch while on the water; even the slightest roll and pitch of the vessel will result in inaccurate data. This is very important to remember; weights are not to be collected while on a HB assignment. The captain and deckhands (mates) should not be interviewed, regardless of whether or not they fish during the trip.

## While at Sea: Recording Discarded Catch

For trips with only a few anglers, it may be possible to identify, count, and measure discards for all of the anglers who are interviewed. For trips with a high number of anglers, FIs may need to record discarded catch data for a subset of the anglers interviewed. Therefore, select a sub-sample of anglers who can be easily monitored for discard information.

Discarded catch (Type 9) is defined as catch that is either thrown back alive (disposition 1) or thrown back dead (disposition 6). When recording a fish that is thrown back dead (disposition 6), include a note to support that the fish was actually dead when discarded (e.g., fish suffered barotrauma and floated on the water's surface).

Work quickly and efficiently on headboats to obtain fork lengths for live fish that will be discarded back over board so be prepared to handle uncooperative fish.

Discarded catch must be identified at the species level; however, if a fish is caught and used for bait, the fish would not be put on the discard form. Record that particular species under the appropriate angler's Type 3 catch and record a disposition code of 4 (used/plan to use for bait). If discarded catch cannot be identified to the species level (i.e.,
juvenile Little/Winter Skate) the fish should be recorded with the appropriate disposition in Type 2 catch instead.

Only report fish on the discard form if one of two instances happens:

1) Either the fish was thrown back into the water alive, or
2) The fish (in its entirety) was thrown back into the water dead.

If the fish is used for any other purpose it should not be recorded on the discard form.
FIs are encouraged to collect ALL discard catch information (using the discard catch form) for the selected discard anglers while they are fishing. However, it is important that FIs do not attempt to observe and measure discards for so many anglers that the quality of the data is compromised. Fls may be monitoring an angler for discarded catch, but he/she may not have any. For this reason, it's very important to accurately complete Box B of the Intercept Form, to show which anglers were monitored for discards. Below is what Box B on the Intercept Form looks like.

BOX B. [If headboat ride-along:] Is this one of the anglers you monitored for discard (Type 9) catch? $\quad \square$ Yes $\square$ No $\square$ Not a HB ride
Regardless of whether an angler discarded any catch, FIs must accurately reflect if they were monitored for discard on their form. It is also a good idea to make any note explaining this scenario on the comments section of the discard form.

## Data Collection

Data collection during an at-sea HB assignment consists of three stages:

1. Collecting basic information during the ride from the dock (the trip out);
2. Collecting discard catch information (Type 9) while anglers are fishing (while at sea); and
3. Collecting Type 2, Type 3, and trip-specific information on the trip back to shore (the trip back) or, in some states with smaller headboats, once back at the dock.

## The Trip Back: Measuring Catch and Completing the I nterview

As long as the headboat captain is accepting of measuring catch onboard, interviewing should begin as soon as the anglers have completed their fishing and the boat begins the return to the dock. However, some smaller headboats will require that FIs wait until the boat returns to the dock before measuring Type 3 catch. In this case, standard measuring practices should commence as soon as the captain is ready to have the FI work with the anglers' catch after the boat has returned to the dock.

During this portion of data collection, complete items 11 through 15b, and 25 through 31 for each angler randomly selected for the interview. Items 12 and 13, relating to area fished and distance from shore may be obtained from the captain and needs to be consistent for all forms.

It is not until the intercept is completed that the interviewer time is recorded on the Intercept Form. This time will only be recorded on the trip back to the dock (or at the dock if that is when FIs complete the intercept questionnaires). All interview times should be at least 1 minute apart after all fishing activity has been completed

## Recording Discarded Catch on a Headboat Trip

## General Instructions

FIs will collect more detailed data about discarded catch information during HB assignments. The following section describes the form used to record this information, the Discard Catch Form.

Unlike regular Intercept interviews, where one interview form is used for each angler, the Discard Catch Form is designed so that discarded catch from several anglers can be recorded on one form. Up to 40 fish records may be recorded on each form. If multiple forms are used, please complete all items for each form (including items 2-8), and note how many forms were used (e.g., pg. 1 of $3, \mathrm{pg} .2$ of $3, \mathrm{pg} .3$ of 3 ) in the comments box.

## I tem-by-I tem I nstructions

Items 2 through 8 are questions that FIs will fill out based on the specifics of the assignment; they are not questions that the FI will ask an angler.


1. Form - Prefilled barcode used to identify which form is being scanned in order to accurately input survey data.
2. Assignment No. - This number will almost always be ' 1 ,' as all FIs will usually only work one assignment per day.
3. Interviewer ID - Each FI has a unique four-digit identification number. This number must be used on all submitted forms.
4. Year/ Month/ Day - Record the date of the HB trip. Two digits should be used for the month and for the day. Please make sure to record the MONTH before the DAY.
5. State Code - Enter the two-digit numerical code for the state from which the headboat departed. State codes can be found in the Coding Manual.
6. County Code - Enter the three-digit numerical code for the county from which the headboat departed. County codes can be located in the Site Register, or in the Coding Manual.
7. Site Code - Enter the four-digit numerical code for the site from which the headboat departed, if available. Keep in mind that FIs are not allowed to sample at new sites. Unlike the ASF where FIs are recording the control number, on the discard form FIs will be entering the site number.
8. Vessel Name - Write the full name of the headboat in the space provided, as it appears on the vessel, making sure that spelling is exactly correct.

## Discarded Catch Information

FIs are required to complete the following information for each discarded species. In the case of zero discarded catch having been recorded, FIs should still complete a discard form and include in the delivery of their forms.

## Disposition

Two options are provided for the disposition of discarded catch: disposition 1 - "thrown back alive" and disposition 6 - "thrown back dead/plan to throw away (comment required)".

If FIs assign a disposition 6 to any of the fish, they MUST include a note in the comments section to state what happened to the fish and why it was given a disposition 6. A general comment would be "fish thrown back dead, stomach was sticking out and floated on surface." Fish that are used for bait (disposition 4) should not be included on the discard form, but must be recorded in the Type 2 or Type 3 section of the Intercept Form for that particular angler. If the bait fish was not identified to the species level it should be recorded in the Type 2 section; if it was identified to the species level it should be recorded in the Type 3 section, even if a length was not obtained. Fish that are recorded on the discard form should NOT also be recorded on the Intercept Form.


## Species Name

Record the full (common) name of the fish. Do not use local names or abbreviations.

## Species Code

Please record the six-digit species code from the Coding Manual. Interviewers must
identify discarded fish at the species-level. If not possible (i.e., used for bait, only fillets available, or truly unsure of identification), the fish should either be included as Type 2 or 3 . However, note any identifying characteristics of the fish, and contact the state coordinator after the HB trip for help in identifying the fish more exactly.

## Length

Using the instructions for measuring fish described under "Length Measurement," record the length of the fish in millimeters.

## Interview Number

FIs must note the interview number of the angler whose fish is recorded on each line of the Discard Catch Form. This information will allow each fish on the form to be linked back to an APAIS interview. Fish records that cannot be linked to an Intercept Form cannot be used.

## Observed? Yes/ No

Make every effort to observe every fish thrown back by "discard anglers" (the anglers subsampled for observation). However, it is possible that some fish will be missed. The "OBS.?: YES/ NO" column is meant to provide for those instances where the FI did not directly observe a discarded fish and so did not measure the fish before it was thrown back. In this case, the species name, species code, disposition, intercept number, and " $N$ " should be entered into the observed column with "9999" recorded as the length. FI s should try to observe at least 95 percent of fish listed on the discard form.

All catch thrown back by discard anglers will be recorded on the discard form. Therefore, no disposition 1 or 6 records should be recorded in the Type 2 catch on the Intercept Form for discard anglers. Only catch that was not discarded (i.e., dispositions 3, 4, 5, or 7) should appear in the Type 2 or Type 3 (if seen) catch for these anglers.

## Comment Box

Use the comment box to note any information that should be communicated about the assignment. If multiple Discarded Catch Forms were used on a HB assignment, please note the number of the form in the box (e.g., pg. 1 of $3, \mathrm{pg} .2$ of $3, \mathrm{pg} .3$ of 3 ).

## Back of the Form

Record the total number of catch for each disposition in the box. This is a total from every angler that was monitored for discards. In the case that multiple discard forms are filled in, FIs should tally ALL discards on the back of only the last discard form. If more than 15 anglers were monitored for discard, the total count of discards can be transferred between the two last discard forms.

For each angler monitored (for discard catch), list the intercept number and the total number of fish caught in the boxes provided. Also, be sure to summarize the total number of fish at the bottom.

Please record the total number of catch for each disposition in the box below.


For each angler monitored (for discard catch), please list the intercept number and the total number of fish caught by that angler in the boxes below.


## 6. FOR-HI RE SURVEY (FHS) VALI DATI ON TASKS

## For-Hire Survey (FHS)

The For-Hire Survey (FHS) is a directory-based telephone survey of for-hire fishing vessels. Using state directories of for-hire vessels, vessels are categorized as either charter or headboats and sampled weekly. Representatives from selected vessels are contacted by telephone to answer questions about their fishing effort in the previous week. The field interviewer's role is to provide independent observations of the selected vessel's activity.

## Dockside Validations

Field staff are responsible for conducting dockside validations of the self-reported trip data collected from charter and headboat operators through the FHS. The dockside observations are used to provide adjustments to the self-reported trip records to correct for erroneous reports (under- or over-reporting, or simply misreporting date of trip).

The FHS dockside validation consists of visiting the access sites for a subset of vessels that were selected for the FHS, and recording whether the vessel is docked or away. If the vessel is away from the dock, an attempt should be made to determine the vessel's activity. These visits should occur in conjunction with, or on route to, routine intercept assignments.

Charter and headboats docked at public access marinas, sites in assigned slips, or those assigned to a permanent location in a storage shed that are selected for the FHS must be validated during the week that they are sampled. All sampled vessels that can be validated should be validated at least once during the sample week. Multiple validations per vessel per week are encouraged when they can be done in conjunction with scheduled intercept sampling (but only one validation per vessel per day). Sites should be visited at a time of day when it would be likely that the vessel would be away from the dock on a for-hire fishing trip (e.g., 8:00 AM - 5:00 PM).

If a preliminary check determines that a vessel is out, FIs must try to determine what activity the vessel is engaged in, such as actively charter fishing, fishing for his/her own leisure, checking out the engines, etc. In order to do this, speak to a reliable source such as a marina operator or booking agent. If the source wants to know why the FI needs this information, FIs should be courteous and explain that the survey attempts to locate and document areas with charter boat activity in order to improve effort estimates. If a boat captain asks why FIs are inquiring about fishing activities, explain that the survey makes sure that the information collected during the weekly for-hire fishery phone survey is being recorded accurately.

During a dockside validation site visit, FIs should check the permanently assigned boat slip to see if the vessel is in or out. The visual check will also work with vessels that are assigned to a permanent location in a storage shed.
FIs may not conduct intercept interviews with anglers from a boat on the same day in which the vessel is being validated. However, FIs may intercept anglers from a vessel which had been validated on a different day of that week. If interviews are obtained from a boat that is on the list of those selected for sampling, then a dockside validation record should NOT be included for that date. Validating charter boats at a site is acceptable as long as anglers from the validated boat are not intercepted.

## Distributing Dockside Validation Assignments

At the beginning of each Wave, state coordinators will issue FIs a list of selected boats which could potentially be validated. Using this list, FIs will be asked to validate as many vessels as is possible during the appropriate week. FIs will review and report completed FHS Dockside Validation Forms to their state coordinator within the same weekly package as angler interviews. Upon receiving these weekly submissions from FIs, state coordinators will be responsible for electronically submitting validation information on the ACCSP's Assignment Tracking Application.

Unlike standard intercept assignments, which must be completed on a specific day, dockside validation assignments may be completed at any time during a specific week (defined as Monday through Sunday). In addition, vessels may be validated more than once during the week they have been drawn (but not more than once per day). Dockside validation assignments should be completed while travelling to or from an intercept assignment.

In the case of a problem in the field (e.g., boat not located, problem locating trailered boat, etc.), FIs should contact their state coordinator.

## Completing the FHS Dockside Validation Form

FIs must complete the dockside validation form for each assignment. Each dockside validation is listed on a separate line on the form. Please use a separate form for each week's worth of assignments. An example of a completed form is shown in Figure 6.1.

Figure 6.1: Example of a Completed Dockside Validation Form

| Int <br> ID | Sample <br> Week | Date | Time | Vessel <br> ID | Vessel <br> Name | CH or <br> HB? | State | County | Site | Status | Source |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1234 | 24 | $6 / 12 / 17$ | $09: 45$ | 926746 | MISS DONNA | C | 10 | 005 | 0003 | 5 | 1 |
| 1234 | 24 | $6 / 12 / 17$ | $09: 50$ | 279059 | ANGLER | $H$ | 10 | 005 | 0013 | 6 | 2 |
| 1234 | 24 | $6 / 12 / 17$ | $10: 13$ | 265965 | IND IAN | C | 10 | 005 | 0013 | 1 | 1 |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |

Comments:

* Gone for season - unknown where.
- Dockmaster said vessel ont for repairs.

Note: The Dockside Validation From goes to the state coordinator who then enters the information into the ACCSP Online Assignment Tracking Application

A completed validation form will include:

- Intercept I D: Unique 4-digit identification number. This number will be printed at the top of the form.
- Sample Week: The week in which the dockside validation(s) must occur. The sample week runs from Monday through Sunday.
- Vessel Name: The name of the vessel as it currently appears on the vessel directory.
- Vessel Number: The vessel number is often a state registration number or Coast Guard number. It serves as a way for FIs to identify the vessel against the vessel directory.
- CH or HB: The vessel will be coded as either a charter boat (CH) or headboat (party boat) on the vessel directory, and this code reflects how the boat operates the majority of the time. Note: the vessel directory does not necessarily adhere to the " 6 or fewer= $\mathrm{CH},>6=\mathrm{HB}$ " rule. In the directory, designations are based on vessel-reported activity.
- State: The state of operation as listed on the vessel directory.
- County: The county of operation as listed on the vessel directory
- Site: The intercept site at which the vessel operates, as recorded on the vessel directory. Please update, if necessary. The following codes may be used for vessels not located at an existing intercept sites:
o 7777 = private access site
o $8888=$ unknown public access site
o 9999 = refused site information
- Date: The date on which the dockside validation occurred.
- Time: The time the validation was recorded (use 24-hour time).
- Status: The status of the vessel. The following are the acceptable status codes:
o $1=$ Vessel in
o $2=$ Vessel out-charter/headboat fishing
o 3 = Unable to validate (e.g., trailered vessel, or otherwise can't locate after physically attempting)
o $4=$ Vessel out—non-charter/headboat activities
o $5=$ Vessel out-fishing status unknown
o $6=$ Vessel not in slip, not in water (dry dock)
o $8=$ Not applicable—provide a note in the comments section
- FIs should use Status " 3 " if unable to account for the vessel's whereabouts. This code should be used when unable to verify whether the vessel is in or out, or cannot be located at the site. Status " 8 " should only be used if no other status codes are applicable; if using this code, provide a comment explaining why this status code was chosen.
- Source: The source of the status code.
o 1 = Direct observation by FI
o 2 = Secondary information (such as marina operator, booking agent, etc.)


## For-Hire Vessel Directory Updates

The FHS vessel directory is continuously updated during the survey year.
Each vessel update includes unique identifiers for that vessel (vessel name, state registration, etc.) and any new contact information for vessel representatives (names,
addresses, and phone numbers). A principal "representative" is designated for each vessel in the directory. That principal representative may be the owner, one of the captains of the vessel, or some other person designated by the owner, who can report information about that vessel's fishing activity.

Remember that all the information that is collected for this survey, including all the information on the vessel directory, is confidential and should be treated as such. FIs should provide updates to the directories for each Wave to their supervisor or other designated point of contact on an ongoing basis as new information becomes available.

## Online Vessel Directory

NOAA Fisheries has developed a new online webtool for access to the Vessel Directory for for-hire recreational boats in 2018. It will be a component of the existing Site Register website (https://www.st.nmfs.noaa.gov/siteregister/html/siteRegister.jsp) so a single account for those with editing privileges will allow multiple users access to a single database, updated in real time, just as the Site Register currently works. Once in the Site Register, the online vessel directory can be accessed by clicking the button labelled "Switch to Vessel." The primary uses of the directory are the For-Hire Survey (FHS), the weekly telephone survey of for-hire fishing effort, and the APAIS for the field tasks supporting the FHS and for-hire effort estimates. These tasks include field pre-validation observations and the on-list question on the APAIS interview (Box E). These tasks require the Vessel Goodlist, or sample frame, a subset of the directory produced each Wave, and the weekly FHS sample draw list of surveyed boats, also produced each Wave for the included weeks. These products will be produced by NOAA Fisheries or the FHS contractor and delivered to ACCSP who will in turn provide necessary information through the ATA for state use.

In addition to editing existing vessel information in the directory, APAIS field interviewers may encounter boats not listed in the directory. These should be entered as new vessels (after checking for boats that may be misidentified). Minimum information needed to enter a new vessel record is the vessel name and registration number (Coast Guard or state), type of boat (Charter or Headboat), location (county required, site is preferable), contact name (captain, owner, or representative), and phone number. Vessels without a registration number (e.g. canoes, kayaks, rowboats) are not part of the FHS design and should not be included in the directory.

Various roles are assigned to control approvals of information entered. On the Atlantic Coast in 2018, state coordinators have the capability to edit for each state. In Maine, North Carolina, and Georgia, the state coordinator also have approval authority for all edits (these three states conduct the FHS rather than the contractor); for all other Atlantic Coast states (New Hampshire through South Carolina), the FHS contractor, Quantech in 2018, has approval authority. This role is necessary because Quantech has a contractual requirement to maintain the directory and is therefore responsible for all data entered into the directory. Roles and responsibilities for information in the vessel directory will be evaluated annually.

## 7. AFTER ASSI GNMENT: ADMI NI STRATI VE TASKS

## Weekly Report Delivery

Field Interviewers will report weekly activity to their state coordinator at the end of each week (Sunday). The reported information will consist of the dates, control numbers, number of completed interviews, number of discard forms, and the number of extra fish forms from the week.

## Field I nterviewer Delivery Summary Sheet

When sending assignment packages to state coordinators, some states will require that FIs include a delivery summary sheet. The purpose of this form is to provide an inventory checklist for the FI as well as for the state coordinator in order to decrease the number of lost assignments. Potential information for this sheet may include:

- Control numbers
- Dates
- Total number of Intercept Forms completed for each assignment
- Total number of discard forms from HB assignments
- Total number of extra fish forms
- Signature of the FI


## ACCSP Assignment Tracking Application Page

The ACCSP has constructed an online application for field interviewers and state coordinators to record and track field assignments for the 2018 APAIS. Interviewers will be able to access this site in order to view each assignment's details. Additionally, state coordinators will act as an additional level of quality control by verifying interview information before submitting assignment totals to the ACCSP.

This application is available to all field staff with login credentials and functions on cell phones. The application includes a calendar of assignments that can be references for assignment details. FIs should contact their state coordinator for more information.

Please see the links below in order to access the ACCSP Homepage as well as the Assignment Tracking Application Page:
-ACCSP Webpage: http://www.accsp.org/
-Assignment Tracking Application Page:
https://safis.accsp.org:8443/accsp prod/f?p=127:LOGIN DESKTOP

## Materials Which FIs Need To Return With Each Completed Assignment

The following must be returned for each completed assignment via the state's mailing preference (as instructed by the state coordinator). Depending on work that is done, this checklist will vary slightly. Please DO NOT STAPLE OR FOLD THE FORMS.

- Assignment Summary Form;
- One intercept for each interview;
- Extra Fish form (when necessary);
- Any discard forms for HB assignment;
- Any dockside validations that are completed with assignment; and
- Field Interviewer Delivery Summary Sheet (if supplied by the state coordinator)


## State Policies

Each state will have its own policies regarding employment, disciplinary actions, and rules and regulations. Please see the state coordinator regarding each state's information. All field staff are provided with 2.0 kg and 12.5 kg Chatillon scales, appropriate field guides, fish measuring board, tape measure, and state ID. If for any reason an FI is no longer going to be working on the project, FIs should contact their state coordinator in order to arrange for the return of state equipment.

## Wave Meetings and QC Site Visits

Employees working on the APAIS will be required to attend at least 2 Wave Meetings each year led by the state coordinator. These may be held in person or by phone as a group teleconference. Wave Meetings allow state coordinators to discuss any updates to the study and other information that may help FIs in the field. Each meeting is also an opportunity to talk with other FIs in order to share experiences and learn techniques that may assist in completing the assignments.

During Wave Meetings, FIs will be required to complete a Fish Identification Test and Quality Control Test as part of ongoing certification. A passing grade of $90 \%$ will be required for both of these tests. The first should be completed by June $30^{\text {th }}$ and the second by September $30^{\text {th }}$ each year.

Periodically, state coordinators may come out into the field and conduct Quality Control (QC) site visits. The purpose of these visits will be to ensure project procedures are being followed, data are being collected appropriately, and to answer any questions. Similar to Wave Meetings, the first should be completed by June $30^{\text {th }}$ and the second by September $30^{\text {th }}$ each year. Additional QC visits may (should) be performed as necessary at any point in the year.

## Interview Validation Phone Calls

In order to assure correct interviewing procedures in the field, state coordinators will validate $10 \%$ of each FIs total intercepts with a maximum of 15 post-validation calls per FI per month. In order to accomplish this, state coordinators will use the name and phone number of anglers from Item 24 in the Intercept Form. Validation of the FIs' information consists of a twelve question, five minute phone call to the selected angler. These questions validate an FIs' interviewing schedule (accurate date and time) as well as each FI's conduct in the field (fish measuring/weighing, professional/courteous attitude, etc.).

## Importance of Confidentiality

It is the Fl 's responsibility to treat any and all information about respondents, whether directly from a response given or simply through casual observations before, during, or after an assignment as confidential.

APAIS project staff has taken special precautions to protect the confidentiality of respondents.

- The confidentiality of all responses to the questions is protected under federal law by the Confidential Information Protection and Statistical Efficiency Act of 2002 (CIPSEA), a government-wide law that provides strong confidentiality protections to many federal agencies conducting statistical surveys. Under CIPSEA, all answers are used for statistical purposes only and cannot be used for any other purpose.
- Respondents should be reassured that any potentially identifying data, such as their phone number, are never made available to anyone outside of project staff. This means FIs should never write down information about a respondent anywhere other than on the Intercept Form where indicated. This includes not writing identifying information in emails to state coordinators or other project staff.
- Individual responses are only analyzed in combination with other responses collected throughout the study.

All APAIS staff, including all ACCSP and state staff members, must share the commitment to protecting the confidentiality of the respondents. Under CIPSEA, the penalties for knowingly and willfully disclosing confidential information are a Class E Felony which includes imprisonment for up to five years and fines up to $\$ 250,000$.

The best way to maintain confidentiality is to keep track of interview forms. They are for the Fl's eyes only; it is not appropriate to share answers with anglers or to show them anyone's questionnaire but their own. When not in use, please keep all forms locked up out of sight, for example, in the trunk of one's car. When returning home at the end of a shift, take forms inside and store them somewhere secure until they can be mailed to the state coordinator. Only survey personnel should have access to any completed forms. Even friends and family cannot be permitted access to this material.

If forms are lost, stolen, or otherwise compromised, please let the state coordinator know immediately so that they can take the appropriate steps.

The APAIS requires each interviewer review and sign the standard Data Collection Agreement at project training. By signing, FIs are entering into a contractual agreement to keep all data collected confidential. It also certifies that FIs will carry out all project procedures precisely as they are presented in this manual and at training. This is one of the mechanisms used to assure confidentiality associated with all data that are collected and processed for the APAIS.

## APPENDIX A: "TO WHOM" LETTER



UNIEDSTATESDEPARIMENTOFCOMMERCE

NATIONALMAPNE FSTEPESSERVCE
Sher Sping Mayjend 20010

## TO WHOM THIS CONCERNS:

The National Marine Fisheries Service, Department of Commerce, in Silver Spring, MD, is given responsibility under the Fisheries Conservation and Management Act of 1976 for managing the nation's marine resources. This responsibility requires that information be gathered from U.S. recreational anglers pertinent to their marine fishing activities.

Interviewers are being assigned to selected fishing locations along coastal areas of the country in order to talk with marine anglers, and to count and measure their catch. Information collected by interviewers will be analyzed and used to help improve the quality of fishing for all anglers.

You are encouraged to cooperate with the interviewer at your location; however, participation is voluntary. Questions regarding the surveyor activities of the interviewer may be addressed to:

Tom Sminkey, Ph.D.<br>Marine Recreational Information Program<br>U.S. Department of Commerce<br>National Oceanic and Atmospheric Administration<br>National Marine Fisheries Service<br>1315 East-West Highway, Room 12358<br>Silver Spring, Maryland 20910<br>(301) 427-8177

The Survey is described in detail and actual survey data are available at our web site:
http://www.st.nmfs.noaa.gov/. Click on Recreational Fisheries Statistics.
The public reporting burden for the Intercept Survey portion of the Marine Recreational Information Program (OMB No. 0648-0659, EXP. 03/31/2019) is estimated to average 4.5 minutes per interview, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments concerning this burden estimate, including suggestions for reducing this burden, to the office listed above and/or to the:

Office of Management and Budget
Paperwork Reduction Project (0648-0659)
Washington, D.C. 20503

## APPENDIX B: I NTERVAL OVERLAP PROCEDURES

## Overlap Assignments

- Assignments scheduled at the same site and time
- Only occur during the following assignment times:

| B Interval | P Interval | C Interval |
| :---: | :---: | :---: |
| 0800-1400 / 1100-1700 |  |  |
| 1100-1700 / 1400-2000 |  |  |

- P Interval always interviews whole 1100-1700 time
- B \& C Intervals only count/assist while sharing a site
- Fourpossible scenarios:

| $\frac{B}{1}$ Interval |
| :---: |
| $0800-1400$ |
| Single Site |


| B Interval |
| :---: |
| $0800-1400$ |
| Two Sites |


| C Interval |
| :---: |
| 0800-1400 |
| Single Site |


| 4 |
| :---: |
| C Interval |
| 0800-1400 |
| Two Sites |

## Overlap Assignments

(Scenario 1)

| B Interval | $\frac{\text { P Interval }}{\text { O800-1400 }} 1100-1700$ |  |
| :--- | :--- | :--- |



Only 3 hours spent interviewing recorded on ASF

PInterval


Full time recorded

## Overlap Assignments (Scenario 2)

| B Interval |  |
| :--- | :--- |
| $0800-1400 / 1100-1700$ |  |



Time spent interviewing at $1^{\text {st }}$ site and record of being at $2^{\text {nd }}$ site recorded on ASF

## P Interval



Full time recorded

## Overlap Assignments <br> (Scenario 3)

| B Interval |  | P Interval |
| :--- | :--- | :--- |
|  |  | C Interval |
|  | $1100-1700 / 1400-2000$ |  |

## P Interval



Full time recorded

C Interval-Single Site


Only 3 hours spent interviewing recorded on ASF

## Overlap Assignments (Scenario 4)

| B Interval |  | P Interval |
| :--- | :--- | :--- |
|  |  | C Interval |
|  | $1100-1700 / 1400-2000$ |  |



Full time recorded


Arrival and $1^{\text {st }}$ site and time spent interviewing at $2^{\text {nd }}$ site recorded on ASF (leave site 1 early to sample full 3 hours at $2^{\text {nd }}$ site)

## Overlapping Assignments Field Protocol:

Although minimal, there exists a possibility that the sample draw will produce assignments at a given site within the B-Interval (8:00AM-2:00PM) or C-Interval (2:00PM-8:00PM) as well as the P-Interval (11:00PM-5:00PM) timeframes. Having multiple assigned intervals means that there would be an overlap of field interviewers at the same site from 11:00AM to $2: 00 \mathrm{PM}$ or $2: 00 \mathrm{PM}$ to $5: 00 \mathrm{PM}$. The key to the overlap is to avoid double counting any anglers and to have interviewers work closely together in order to avoid any data loss or duplications. In order to avoid potential problems or confusion caused by the overlap, the following procedures apply:

## B-Interval (8:00AM - 2:00PM), single-site cluster:

1) The B-Interval FI 's site sampling is completed at 11:00AM when the P -

Interval FI arrives to conduct the P-Interval assignment (11:00AM - 5:00PM) at the site. The B-Interval FI's start time will be 0800 and their stop time will be 1100. All totals recorded on the ASF for the B-interval assignment are only for this first 3 -hour period of the interval. There should NOT be a second line for the second three hours of the FI's interval.
(a) The B-Interval assignment is considered completed with the reason for leaving as "End of sampling time (11)".
2) The B-Interval FI should stay on site conducting counts and assisting with the measuring/counting of fish. The B-Interval FI should leave at the scheduled time (2:00PM) after transferring data to the P-Interval FI.
B-Interval (8:00AM - 2:00PM), two-site cluster:

1) The first site sampling ( $8: 00 \mathrm{AM}-11: 00 \mathrm{AM}$ ) is completed and all information is recorded on the ASF for the assignment.
(a) The B-Interval assignment is considered completed with the reason for leaving as "End of sampling time (11)".
2) The B-Interval FI will:
(a) travel to the second site;
(b) confirm that the P-Interval FI is on site;
(c) code the second site of cluster for ZERO time ( start time = stop time), $\mathbf{0}$ counts and $\mathbf{0}$ interviews on his/her own ASF;
(d) assist the P-Interval FI with counting missed anglers only; and
(e) transfer all information to the P-Interval FI at the end of the B-Interval (2:00PM) prior to departing the site.

## C-Interval, single-site cluster:

1) The C-Interval FI should arrive on the site at the start of the timer interval and only code the second three hours on the ASF. That is, there should only be a single line, recording totals from the latter three hours on site.
2) The C-Interval FI will:
(a) Conduct counting in support of the P-Interval FI until 5:00PM.
(b) Give the count information to the P-Interval FI when the P-Interval FI leaves the site.
(c) Collect all data from the site from 5:00PM to $8: 00 \mathrm{PM}$ as scheduled.

C-Interval (2:00PM - 8:00PM), 2-site cluster:

1) The first site of the C-Interval assignment is selected for the P-Interval assignment in the same site group. The C-Interval FI will:
(a) travel to the first site and conduct counting only, using the provided counting form and protocols;
(b) code the first site of the cluster for ZERO time (start time = stop time), $\mathbf{0}$ counts and $\mathbf{0}$ interviews on his/her own ASF;
(c) give the count information to the P-Interval FI when the P-Interval FI leaves the site; and
(d) travel to the second site at $5: 00 \mathrm{PM}$ in order to collect all data at the second site as scheduled.

## APPENDIX C: I NTERVIEWI NG AND COUNTI NG ANGLER TRIPS



## GENERAL GUIDELI NES

- FIs should keep an accurate record of their start and stop times at each site
- Interviewing anglers should take precedence, but obtaining an accurate reflection of the activity on site during the FI 's assigned time interval is the primary goal of the study.
- Counts must only include anglers who have completed their fishing activity for that day in a single fishing mode.
- Angler trips should be counted in SH, PR, and CH fishing modes.


## METHODS OF COUNTI NG

- Although verbal communication does not have to be made with an angler, FIs should use context clues and best judgement in order to determine recreational fishing eligibility.
- Tally marks should be made as soon as possible in the provided Tally Box to prevent the FI from forgetting the amount of anglers counted during an interview with another angler.


## APPENDIX D: AVOIDING DOUBLE COUNTS

- A given angler should only be included in one place on the ASF. For example; an angler tallied as an "Initial Refusal" could not also be included as Counted.
- Example 1: If a complete interview cannot be obtained from all members of a fishing party (PR/CH/HB fishing modes), all anglers that the FI is unable to interview would be considered initial refusals and should not be included in Confirmed counts.
- Example 2: If an interview is initiated with an angler and they refuse a key item, they would only be counted as a Status 5 interview at the site and should NOT be included as a completed angler trip in the Counted section.
- The INELIGIBLE summary section is where the anglers who do not pass the initial screener are recorded:
o Not Done $=$ ONLY SHORE FISHING MODE - Anglers who not finished fishing at the site when the FI's sampling time is over. FIs should remember that there is a possibility of collecting trip interviews with beach/bank anglers.
o Not Rec $=$ Not recreationally fishing, angler is fishing strictly to provide income.
o Not Salt = Not fishing in salt water, angler is fishing in pure fresh water.
o Not Fin = Not targeting finfish, angler began fishing with the intention of catching crabs, oyster, clams, or some other shellfish.
o Not US = Not fishing in United States territorial waters. Remember, this has no relationship to citizenship. Anglers who do not speak English and are unable to be interviewed should be counted under the Language Barrier INTERVIEW STATUS section.


REMEMBER: I nterviews are the preferred outcome, but counts are important and are extremely useful.

## APPENDIX E: GLOSSARY

- $\quad$ APAI S

Access-Point Angler Intercept Survey

- Assignment Summary Form (ASF)

Form used to collect information about the assignment. The sites sampled, arrival and departure times at each site; site group; total on-site and editing hours; tallies of intercept samples completed by site, eligible anglers at each interview site who were not interviewed by category (Initial Refusal, Language Barrier, Refused Key Item), ineligible anglers intercepted by screening category, and total number of completed angler trips and boat trips are typical data elements included.

- BB

Beach/Bank fishing mode

- Bank

A stretch of rising land at the edge of a body of water not washed by high water, which could be rocks or an overhanging cliff.

- Beach

A stretch of pebbles or sand beside a body of water, often washed by high water.

- Breachway

A natural or man-made inlet that cuts through a barrier island or beach.

- Breakwater

A barrier or offshore structure that protects a harbor or shore from the full impacts of Waves.

- Bridge

A structure spanning and providing passage over water.

- Cast Net

A cast net is a large net, weighted around the edges, which is cast out and falls over the fish, thereby entrapping them. This gear is typically used to catch baitfish or shrimp.

- Causeway

An elevated or raised way across wet ground or water.

- Charter Boat Fishing Mode (CH)

A boat operated by a licensed captain and crew where the anglers are part of a preformed group that has paid a fee for the captain's services for a specific date and time. The number of anglers in the pre-formed group is usually less than seven, but could be up to twelve. Charter vessels are subject to the requirements of the U.S. Coast Guard to carry six or fewer passengers for hire and that engages in charter fishing at any time during the calendar year. Charters, sometimes called guide boats, are usually closed parties, as opposed to the open party status of headboats. Charter boats can engage in a full range of fishing techniques, including trolling, bottom fishing, and drift fishing. Charter boats may make all-day or half-day trips. For the purposes of the APAIS, charter boats are clearly labelled with a "C" in the "For Hire" column of the Vessel Goodlist. The FHS design includes registered vessels carrying paying passengers. Unregistered vessels (see definition below) shall be interviewed as private/rental mode.

- Coastal Household Telephone Survey (CHTS)

Random-digit dialing survey used to estimate the total number of marine recreational fishing trips taken by residents of coastal areas. Data from the telephone household survey and the intercept survey are combined to provide an estimate of the total catch of marine recreational anglers. The CHTS ended in December of 2017.

- Completed Trip

A trip is considered completed if an angler has completed fishing in that fishing mode for the day.

- Control Number

A unique 7-digit number assigned to assignments that reflects the order in which the assignment was drawn; used to track the ultimate outcome of the assignment.

- Dip Net

A dip net is a small hand net consisting of a handle attached to a metal ring with mesh attached, often used to land large fish but also used to catch schools of smaller fish. This type of gear is usually used to catch bait fish in tide pools or to catch herring during spawning runs upstream.

- Discarded Catch (discards)

Fish which have been released by the angler (i.e., not kept). Discards can either be released alive or released dead.

- Dock

A structure built out over water and supported by pillars/anchors, with long-term docking facilities for boats.

- EEZ

Exclusive Economic Zone

- Eligible Angler

Interviewers must determine whether or not an angler is eligible to be interviewed using the screening introduction. To be eligible for an interview, an angler must meet all of the following criteria:
o taken a recreational fishing trip (not commercial)
o fished in saltwater;
o began fishing with the intention of targeting finfish or caught a finfish;
o completed his/her fishing trip (exception for beach/bank mode - see Incomplete Trip Interview on p.94); and
o fished in U.S. waters

- Field Interviewers (FIs)

Field Interviewers are the field staff who conduct face-to-face interviews of anglers at fishing access sites, in addition to their other duties. In this statement of work, they will be referred to as "field interviewers", "interviewers", "FIs", or "samplers."

- Finfish vs. Shellfish

Fishing trips directed at fish with fins are eligible for interviews. Fishers targeting nonfinfish species but who had spent time fishing for finfish during their trip or had incidentally caught finfish are eligible as well. Only fishing trips in which there was no targeted finfishing or incidental finfish catch would be marked as "Not Fin" on the ASF.

- Fish Dump

A monthly listing (electronic data file) of all fish records (i.e., raw data) from the intercept survey interviews, including species code, accepted common name, numbers of fish, weights and lengths of the fish, and disposition of the catch.

- Fishing Access Site

A fishing access site includes the name and location of the place where anglers are intercepted. Each intercept site is given a unique name and site code number. The fishing access site does not define the mode of fishing since anglers may use more than one mode at any given site. Fishing sites are discrete geographical areas from which saltwater recreational fin-fishing takes place. A boat fishing access site should include not more than approximately 100 yards of coastline area.

- Fishing Effort Survey (FES)

The Fishing Effort Survey (FES) is a mail based survey that estimates recreational shore and private boat fishing effort. The FES utilizes the U.S. Postal Service's (USPS) list of residential addresses served by the USPS and the list of mailing addresses provided by licensed or registered anglers, derived from the MRIP National Saltwater Angler Registry (NSAR). It replaces the Coastal Household Telephone Survey (CHTS) in 2018.

## - Fishing Modes

The APAIS is structured around types or "modes" of fishing. There are four major types of fishing: shore fishing (SH) (includes beach/bank (BB) and man-made (MM)), private/rental boat fishing (PR), charter boat fishing (CH), and headboat fishing (HB).

- Fishing Pressure

Fishing pressure is the mode and site specific average number of anglers expected to use and finish fishing in that mode and site over a specific 6-hour time interval on an average day, expressed in the SR as a categorical value. The value must be representative of the average activity for that time interval over the entire month. Separate pressure ratings are given for weekdays and weekend days in each fishing mode for each month of the year. Fishing pressures are used to determine sampling probabilities for each site and are updated each Wave. Pressure categories are included in the Site Register "pressure entry/view" window of each site.

- Fishing Trip

A fishing trip is defined as fishing during part or all of one waking day (as opposed to a calendar day) in one mode. An angler who fished from both a pier and a jetty on the same day made one fishing trip since the pier and jetty are both in the shore fishing mode. However, an angler who fished from a headboat in the morning and a pier in the afternoon is counted as having made two trips - a headboat trip and a shore trip. A trip beginning in the evening but ending past midnight would be considered one trip. In cases of trips lasting multiple days, each of the angler's waking days would be considered a separate trip. A fishing trip must have included actual fishing effort, i.e., the angler must have had gear in the water. Trips where anglers went in search of fish, but never actually employed any effort, for reasons such as sea-sickness or premature termination of the trip due to bad weather are not considered fishing trips.

- For-Hire Survey (FHS)

Survey designed to estimate recreational saltwater fishing catch and effort by anglers fishing in the charter boat and headboat for-hire modes.

- Gill Net

A gill net is a flat net suspended vertically in the water with mesh that allows the fish's head to enter the net but which catches on the fish's gills as it attempts to withdraw. This is not a legal recreational gear-type in many states.

- Headboat Mode (HB)

A boat operated by a licensed captain and crew where individuals or small groups of anglers pay a fee for fishing. The anglers usually do not know everyone on the boat, and a minimum number of anglers are required prior to launch. In this case, any angler can reserve a space, or show up on the day of the trip to join. The vessel is operated by a licensed captain (guide or skipper) and crew, and almost always carries seven or more passengers. In some areas of the country, headboats are called "open party boats" or "party boats" for short. Headboats may make all-day or half-day trips.

- Hook and Line

Hook and line involves the use of traditional rod and reel or hand lines. Trolling, surf fishing, bottom fishing, chum fishing and fishing with floats are all examples of uses of this gear.

- Hours Fished

The time an angler actively fishes in a mode with fishing gear in the water, to the nearest half-hour. If an angler spends time fishing at other sites on the same day, that time is also included provided the fishing was done in the same mode. Not included is the travel time in a boat to or from the fishing grounds.

- Inactive Site

Sites that are temporarily closed to fishing (such as a launch ramp closed for repairs) are marked as "inactive" by coding the pressure with a '9'. Interviewers must inform
their designated contact when they learn that a previously inactive site has become active.

- Incomplete Trip I nterview

Incomplete trips interviews are interviews of anglers who have not yet finished fishing for the day. Incomplete trip interviews must only be conducted in the beach/bank mode.

- Intercept Assignment

An Intercept Assignment (SH, PR, and CH modes) is defined as 6 hour effort to count and interview anglers at an assigned cluster of sites for and time interval on an assigned date. Headboat assignments are boat- and day-specific, must be completed at-sea (i.e., while riding the boat) and may be anywhere from 4 to 15 hours in length.

- Letty

A kind of wall, usually made of rocks, built out into the water to restrain currents or protect a harbor.

- Key Questions (Key Items)

Key questions are questions that must be answered by the angler to qualify the interview as a "good" interview. These are marked by an asterisk (*) on the questionnaire and include: fishing mode; water fished; three/ten mile limit for ocean fishing; state and county of residence; questions related to the fish caught and the anglers who contributed to the catch; and the total number of anglers on the boat, among others. There may be fishing mode-specific key questions.

- Large Pelagic Survey (LPS)

Another recreational fishing survey administered by NOAA Fisheries that collects catch and effort data directed at "large pelagic species" (e.g., tunas, billfishes, swordfish, sharks, wahoo, dolphin, and amberjack) in Maine through Virginia during June through October.

- Length of Fish

Length is measured to the nearest millimeter (mm). For fish with a forked tail, fork length is measured from the tip of the longest jaw or the snout, whichever is terminal with the mouth closed, to the center of the fork. For fish with a non-forked tail, total length is measured from the tip of the longest jaw or the snout, whichever is terminal with the mouth closed, to the tip of the caudal lobe or fin along the center line of the body. There are a few exceptions to this measurement, such as for billfish and sharks.

- Local Fish Names

While each fish species has an accepted common name, anglers often come up with different "local" names to describe the same species of fish. A listing of these local names may be found in the Coding Manual.

- Local Wave Meeting

Regional Representatives meet with field staff to review and discuss field interviewing procedures and cost-effectiveness procedures and to provide continuing education and training; usually occurs shortly after national level Wave meetings.

- MM

Man-made shore fishing mode

- MRIP

Marine Recreational Information Program

- Marine Fishing Areas

Marine or salt waters include oceans and open water areas, as well as inland salt or brackish water bodies. Inland saltwater bodies include sounds, passes, inlets, bays, estuaries, brackish portions of rivers, and other areas of salt or brackish water like bayous and canals. Some coastal water bodies are called lakes but should still be considered saltwater, e.g., Lake Pontchartrain, Louisiana. Freshwater trip data are not collected through this survey, and anglers who fished in tidal freshwater areas are not eligible for this survey.

- Marine Recreational Fishing

The Intercept Survey collects data on fishing in marine (or salt) waters by recreational anglers who are fishing for finfish, not shellfish, and whose trips begin and end anywhere in the United States. The primary purpose of the fishing trip must have been for recreational purposes.

- NOAA

National Oceanic and Atmospheric Administration

- Party boat

Another term used for headboat (see Headboat Mode (HB) on p.94)

- Pier

A structure built out over water and supported by pillars, and without long-term docking facilities for boats.

- Privacy Act of 1974

All surveys conducted by the federal government are regulated by the Privacy Act of 1974. This Act stipulates that each person interviewed must be informed of the following: the auspices under which the survey is being conducted, whether participation is voluntary or mandatory, what will happen if they choose not to participate, and how the information will be used. For the Intercept Survey this means that responses to the questions are completely voluntary, there is no penalty for refusal to answer any or all of the questions, and all information collected remains completely confidential (i.e., interviewed anglers remain anonymous in the dataset and cannot be linked to their responses). The Act is paraphrased on all questionnaires and those statements must be read at the designated point in the screening introduction. Copies of the Privacy Act Statement must be in possession of the interviewer and may be read at any point during the interview to reassure a wary respondent.

- Private Access Site

A private access site is a site that the public normally does not have access to, such as a locked marina, private club, or gated community. This does not refer to whether or not interviewers are allowed to interview by the site's manager and/or owner. Most sites within the Site Register are considered public. Private ownership of a site does not mean that this is a private site. Typically, FIs do not have access to true private access sites; however, a site being privately owner should not affect the ability of interviewer to interview at that site. While true private access sites do not typically allow FIs on site, some do for state agency staff.

- Private / Rental Boat Mode (PR)

Private/rental boat mode includes fishing on both private boats and rental boats. A private boat belongs to an individual; no fee is paid to that individual for the use of that boat. Individuals may contribute to the cost of the trip (e.g., friends chipping in for gas), but there is no commercial transaction. Rental boats are rented or leased from a commercial enterprise. No captain or crew is provided - the renter operates the boat. PR fishing mode also includes canoes and kayaks.

- Public Access Site

A public access site is a site that the public normally has access to, such as an unlocked marina or public beach, state or municipal park or boat ramp, even if the public can only gain access during the site's normal business hours or by paying a fee (such as a launch fee or parking fee).

- Site Code

A four digit code assigned to identify each site on a particular state's master Site Register. Sites are uniquely coded and they keep their same codes through time.

- Spear

A spear is a sharp, barbed pole that is projected or thrown into the fish. Examples are flounder gigs and SCUBA diving spears.

- Tournaments

Tournaments are fishing contests lasting seven or fewer days for which participants have to register. Prizes are given according to the rules of the contest--most, biggest, etc. Informal "pools", such as those arranged on party/headboats, are not considered tournaments.

- Trap

A trap is usually a metal screen box, extended by a rope, which has bait inside and a small hole which the fish can swim into but not return. Examples are fish pots and crab traps.

- Trawl

A trawl net is a large cone-shaped net which is dragged along the bottom from a boat. This is not a legal recreational gear in many states.

- Type 3 (available) Catch

Type 3 catch is "available catch"; identified to species and enumerated by trained interviewers.

- Type 2 (unavailable) Catch

Type 2 catch is "unavailable catch" reported by anglers. There are cases in which this may or may not represent harvested fish: catch which was harvested but unavailable (e.g., fish that were caught and used for bait, released dead, or otherwise not observed by the interviewer) and catch which was released alive.

- Type 9 Catch

Type 9 catch is a subset of Type 3 catch; directly observed, counted and measured by trained interviewers on at-sea headboat assignments; represents released fish.

- Unregistered Vessel

A vessel that does not have either a Coast Guard documentation number OR a State Registration number. Typically includes vessels without motors such as canoes, kayaks, rowboats, and skiffs. These vessels shall be interviewed as private/rental boats.

- VESSEL GOODLIST

A list of For-hire vessels that are subset of the vessel directory, referenced for APAIS intercept Box E.

- Wave

A Wave is a two-month sampling period. Wave 1 = January and February,

- Wave 2 = March and April, Wave 3 = May and June, Wave $4=$ July and August, Wave 5
$=$ September and October, and Wave $6=$ November and December.
- Week

For the FHS, sampling within Waves is conducted on a weekly basis. A week is defined as Monday through the following Sunday.

- Weekly Tallies

A report indicating the number of assignments completed, rescheduled, or cancelled, as well as interviews obtained in each fishing mode; delivered to the state coordinator on a weekly basis.

## APPENDIX F: APAIS FORMS

## Assignment Summary Form:



## Atlantic Intercept Form (Front):



## North Carolina I ntercept Form (Front):



READ PRNVACY ACT. This study is beling conductod in accordiance with the privacy act of 1974. You are not required to answer any question that you consider to be an invasion of your privacy.

*12. Was most of your (specify mode) fishing effort today in the -

18. Not counting today, within the past 12 months, that is since (insert
month) of last year, how many days have you gone saltwater sport month) of last year, how many days have you gone saltwater sport finflishing in this state or from a boat launched in this state?

19. Not counting today, within the past 2 months, how many days?

20. What is your state and county of residence? If county unknown, asic. What city or town do you live in?

14. What type of gear was primarily used? (Seloct one ont))
01Hook and Lhe
07
$\square$ Trap
$\qquad$Spear 09Hand
,Other (Spocit)
02Dip Net, A-frameCast Net
04Gill Net
05
$\qquad$ Seine
05 $\qquad$
$\qquad$
16. [Ask, only if "Beach" or "Bank"] How many additional hours do you expect to fish from shore today? That is, how many more hours will you actually have your gear in the water?

## codes

$K$, "Dony Know" $=99.8$
K, Refised $=99.9$
$\square$ Not fishing from Beach or Bank


23a. Gender
23b. How old were you on your last birthday?


## I ntercept ( Atlantic and North Carolina) Form Back:




## Extra Fish Form:


*25. UNAVAILABLE CATCH Did you catch any fish that are not here for me to look at? For example, any that you may have thrown back or used for bait? NOT GROUP CATCH - Only catch from Angler being interviewed.

|  | DISPOSITION CODES FOR Q25 |  |
| :--- | :--- | :--- |
| 1- Thrown badk alve | 4 - Usedplan to use for bait | 6 Thrown back deadyplan to throw away |
| 3 - Eaten'plan to eat | $5 \cdot$ Soldjplan to sel | 7 - Some other purpose |

TYPE 2 RECORDS: (INDIVIDUAL CATCH UNAVAILABLE IN WHOLE FORM)
Species Name

| 1. | Species Code |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2. |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. |  |  |  |  |  |  |  |  |  |  |  |  |
| 4. |  |  |  |  |  |  |  |  |  |  |  |  |
| 5. |  |  |  |  |  |  |  |  |  |  |  |  |

*31. AVAILABLE CATCH - COMPLETE TYPE THREE RECORD BY ASKING: May I look at your fish? What do you plan to do with the MAJORITY of the (species)?

|  | DISPOSITION CODES FOR Q31 |  |
| :--- | :--- | :--- |
| 3 - Eateniplan to ear | $5 \cdot$ Soldaphan to sel |  |
| 4- Usedphan to use for tat | $6 \cdot$ Plan to throw away | Some oter puppose |


| Species Name | Species Code |  |  |  |  | \# of Fish |  | Length (mm) |  |  | Weight (kg) |  |  | 8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. |  |  |  |  |  |  |  |  |  |  |  | . |  |  |
| 2. |  |  |  |  |  |  |  |  |  |  |  | - |  |  |
| 3. |  |  |  |  |  |  |  |  |  |  |  | . |  |  |
| 4. |  |  |  |  |  |  |  |  |  |  |  | . |  |  |
| 5. |  |  |  |  |  |  |  |  |  |  |  | . |  |  |
| 6. |  |  |  |  |  |  |  |  |  |  |  | . |  |  |
| 7. |  |  |  |  |  |  |  |  |  |  |  | . |  |  |
| 8. |  |  |  |  |  |  |  |  |  |  |  | . |  |  |
| 9. |  |  |  |  |  |  |  |  |  |  |  | . |  |  |
| 10. |  |  |  |  |  |  |  |  |  |  |  | - |  |  |
| 11. |  |  |  |  |  |  |  |  |  |  |  | . |  |  |
| 12. |  |  |  |  |  |  |  |  |  |  |  | - |  |  |
| 13. |  |  |  |  |  |  |  |  |  |  |  | . |  |  |
| 14. |  |  |  |  |  |  |  |  |  |  |  | . |  |  |
| 15. |  |  |  |  |  |  |  |  |  |  |  | - |  |  |
| 16. |  |  |  |  |  |  |  |  |  |  |  | - |  |  |
| 17. |  |  |  |  |  |  |  |  |  |  |  | - |  |  |
| 18. |  |  |  |  |  |  |  |  |  |  |  | . |  |  |
| 19. |  |  |  |  |  |  |  |  |  |  |  | - |  |  |
| 20. |  |  |  |  |  |  |  |  |  |  |  | - |  |  |
| 21. |  |  |  |  |  |  |  |  |  |  |  | - |  |  |
| 22. |  |  |  |  |  |  |  |  |  |  |  | - |  |  |
| 23. |  |  |  |  |  |  |  |  |  |  |  | - |  |  |
| 24. |  |  |  |  |  |  |  |  |  |  |  | . |  |  |
| 25. |  |  |  |  |  |  |  |  |  |  |  | . |  |  |

## Discard Form (Front):


8. VESSEL NAME


NOTE: Fish recorded on the Discard Form should not be recorded as Type 2 Catch on the Intercept form.


## Discard Form (Back):

## Discard Summary Form

Please use as many discard forms as necessary to complete the assignment.
Record summary information for all of discard data on the back of the last form.
Please record the total number of catch for each disposition in the box below.


For each angler monitored (for discard catch), please list the intercept number and the total number of fish caught by that angler in the boxes below.

|  | $\begin{aligned} & \text { Inter- } \\ & \text { cept \# } \end{aligned}$ |  | al \# Fish Caught |
| :---: | :---: | :---: | :---: |
| 1. |  |  |  |
| 2. |  |  |  |
| 3. |  |  |  |
| 4. |  |  |  |
| 5. |  |  |  |
| 6. |  |  |  |
| 7. |  |  |  |
| B. |  |  |  |
| 9. |  |  |  |
| 10. |  |  |  |
| 11. |  |  |  |
| 12. |  |  |  |
| 13. |  |  |  |
| 14. |  |  |  |
| 15. |  |  |  |
| 16. |  |  |  |
| 17. |  |  |  |
| 18. |  |  |  |
| 19. |  |  |  |
| 20. |  |  |  |

TOTAL



[^0]:    *Item 20 - Residence - All anglers are asked their state and county of residence. If the angler does not know his/her county of residence, enter the city name on the Intercept Form. FIs should then return to that Intercept Form after having looked up the county in which that city is located. However, the FI should be sure to make a note of this within the ASF.

[^1]:    BOX B. [If headboat ride-along:] Is this one of the anglers you monitored for discard (Type 9) catch? $\quad \square$ Yes $\square$ No $\square$ Not a HB ride

[^2]:    "Refused Key Question (Status 5)" - this code should be used if the angler refuses to answer a key item. All questions on the Intercept Form marked with an asterisk (*) are considered key questions. As soon as a key question is refused, thank the angler and terminate the interview. Submit all "Refused Key Item" Intercept Forms, but do not give them an intercept number (Item 5) on the actual Intercept Form. Each "Refused Key Item" intercept should be recorded on the ASF under "Refused Key Item."

