## Reef Fish Monitoring

(Abstract only)

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## **Reef Fish Monitoring**

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## **Abstract**

During the sampling period of March 4 to July 14, 2009, a total of 30 stations were sampled twice west of Parallel 67 of Puerto Rico. Hook and line yielded twenty nine species representing 14 families weighing over 25/kg of finfish. The groupers constituted 43.6% of total catch, of which two species represented 35% of the hook and line catch in terms of number. For the sampling period of October 20, 2009 to March 11, 2011, a total of 40 stations were sampled twice off the east coast. A total of thirty four species representing 15 families weighing 232 kg of finfish were collected. Groupers constituted 68.7% of total catch by number, of which two species made up 63%.

Red hinds (*Epinephelus guttatus*) and coneys (*Cephalopholis fulva*) represented by weight 15.6% and 12.6%, respectively of the total hook and line catch for the west coast survey. For east coast, red hinds made up 18 % and coneys 34.1% of total catch per weight. The graysby (*C. cruentata*) was the third species of grouper that made up the bulk of this group category for both sampling periods and coasts. Snappers which are considered the most valuable commercial species group were scarcely represented in both sampling periods.

Species composition by sampled stations varied according to two factors: area and depth. Both coasts species composition are basically the same, with slight differences in the contribution of certain species groups. For instance squirrelfish constituted a higher percentage of west coast catch by number than the east.

Catch per unit effort (CPUE) by stations for west coast ranged from 0.0053 to 2.8648 kg//trip hours; and from 0.02375 to 2.5301 kg/trip hours for the east coast, disregarding trips with no catches. Fishers experience influenced CPUE; in general terms most experienced fishers had a greater CPUE than those with less experience.