FISH ON!

HOOK-AND-LINE SURVEY VOLUNTEER NEWSLETTER

SPRING/FALL 2017





GREETINGS VOLUNTEERS!

Another successful year of hook-and-line surveys has been completed. We want to thank all our volunteer anglers who helped this year, especially those who remained flexible when we had to postpone surveys due to rough seas. Many thanks to our scientific assistants who volunteered their time. To our charter captains and crews - Lance Fletcher, Mitch, and Terry on the Norwester; Jeff Miles and Tom on the Top Gun - we appreciate your hard work and collaborations.

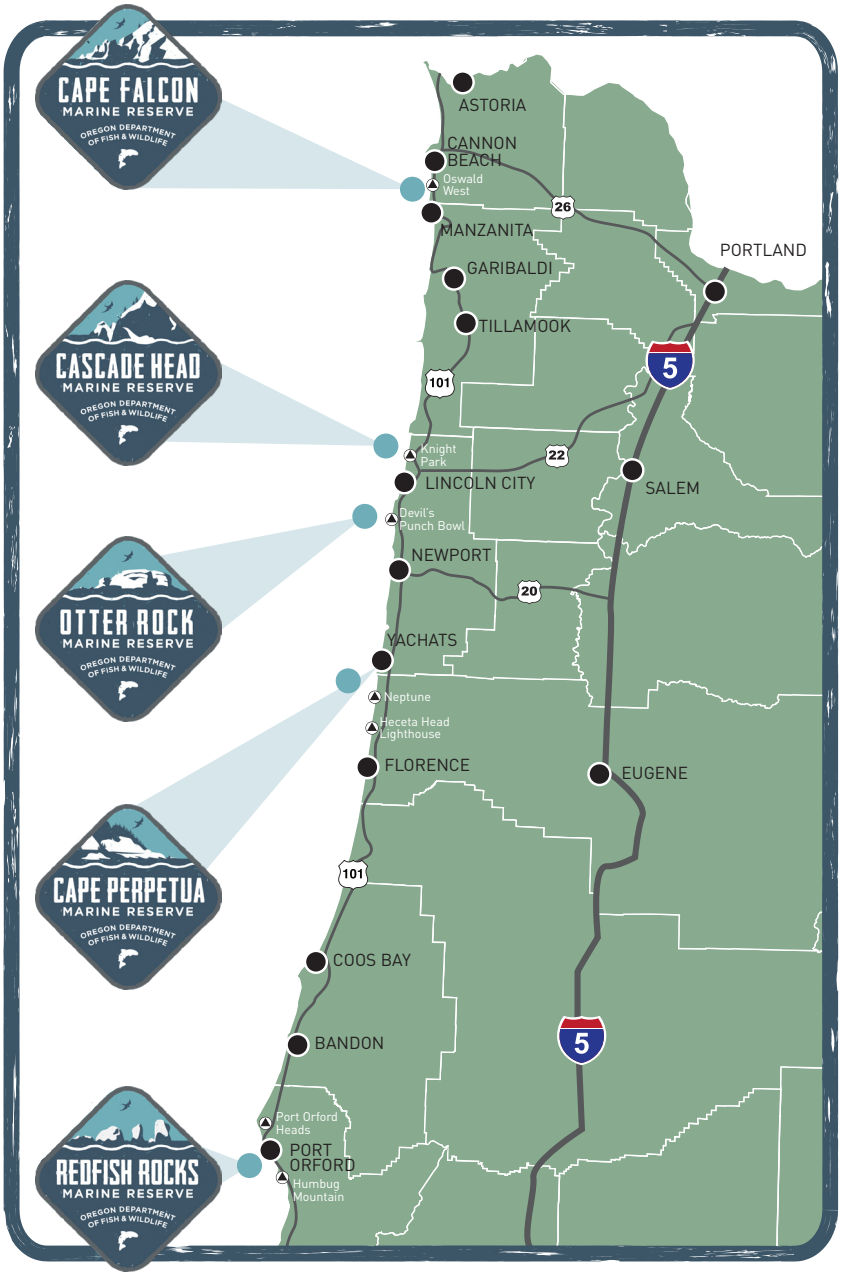
This year we completed our 3rd year of surveys at Cape Falcon, as well as our 6th year of hook and line and 3rd year of longline surveys at Redfish Rocks.

The ODFW Marine Reserves Program also welcomed our new lead scientist, Dr. Lindsay Aylesworth, who joined our team in April. We look forward to working with Lindsay as she guides us through the next stages of marine reserves monitoring and research here in Oregon.

Please enjoy this brief summary of the data YOU ALL helped collect this year. Thank you and we hope to see you again next year for the surveys at Cascade Head and Cape Perpetua!

Sincerely,

Lindsay, Jessica, Ashley, and Wolfe
ODFW Marine Reserves Ecological Monitoring Team



2017 HIGHLIGHTS

2 Sites Surveyed
Cape Falcon -- 8 days
Redfish Rocks -- 12 days

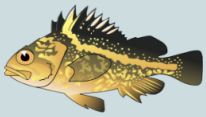
20 Trips
63 Volunteer Anglers

1,873 Fish Caught:
17 Species from
4 Families

RECORD LARGEST and smallest catches from 2017

BLACK ROCKFISH
minimum: 24 cm (10 in)
maximum: 52 cm (21 in)

CANARY ROCKFISH
minimum: 19 cm (8 in)
maximum: 53 cm (21 in)

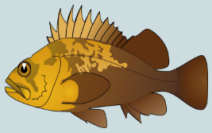


CHINA ROCKFISH
minimum: 26 cm (10 in)
maximum: 45 cm (18 in)

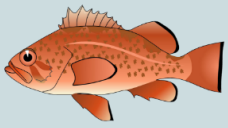
COPPER ROCKFISH
minimum: 41 cm (16 in)
maximum: 51 cm (20 in)

TIGER ROCKFISH
35 cm (14 in)

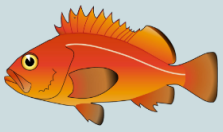
DEACON & BLUE ROCKFISH
minimum: 12 cm (5 in)
maximum: 25 cm (10 in)



QUILLBACK ROCKFISH
minimum: 21 cm (8 in)
maximum: 45 cm (18 in)

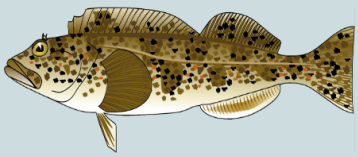


VERMILLION ROCKFISH
minimum: 38 cm (15 in)
maximum: 53 cm (21 in)

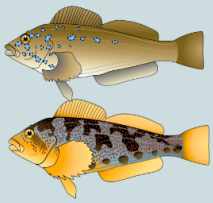


YELLOWEYE ROCKFISH
minimum: 24 cm (10 in)
maximum: 62 cm (24 in)

YELLOWTAIL ROCKFISH
minimum: 24 cm (9 in)
maximum: 44 cm (20 in)

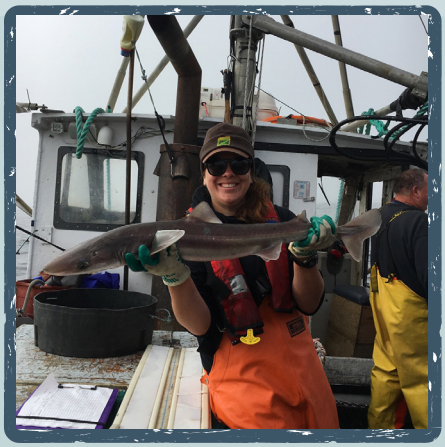


LINGCOD
minimum: 34 cm (13 in)
maximum: 97 cm (38 in)



KELP GREENLING
minimum: 27 cm (11 in)
maximum: 43 cm (17 in)

CABEZON
minimum: 21 cm (8 in)
maximum: 71 cm (28 in)



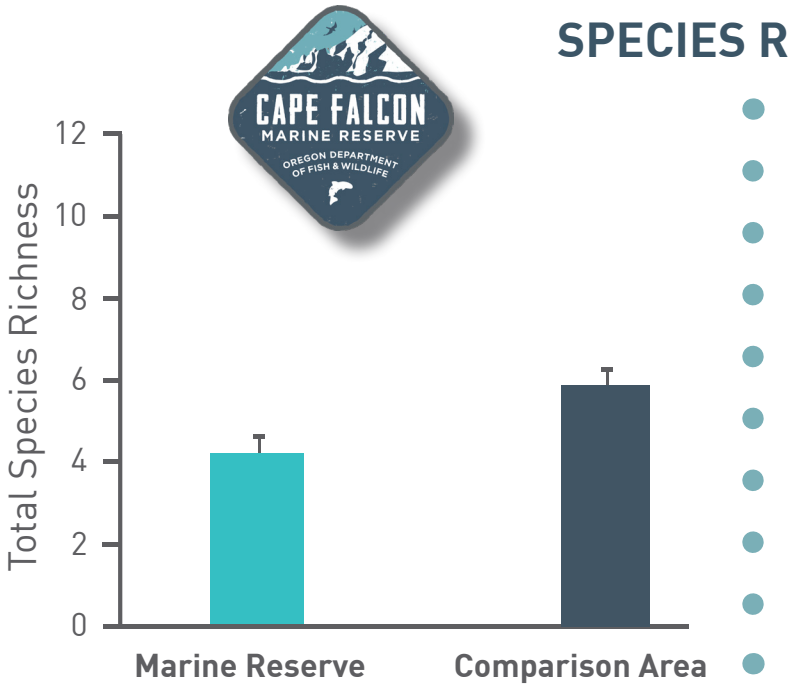
Tiger Rockfish icon courtesy of the Oregon Coast Aquarium, all other fish icons courtesy of Dr. Larry Allen (CSUN)

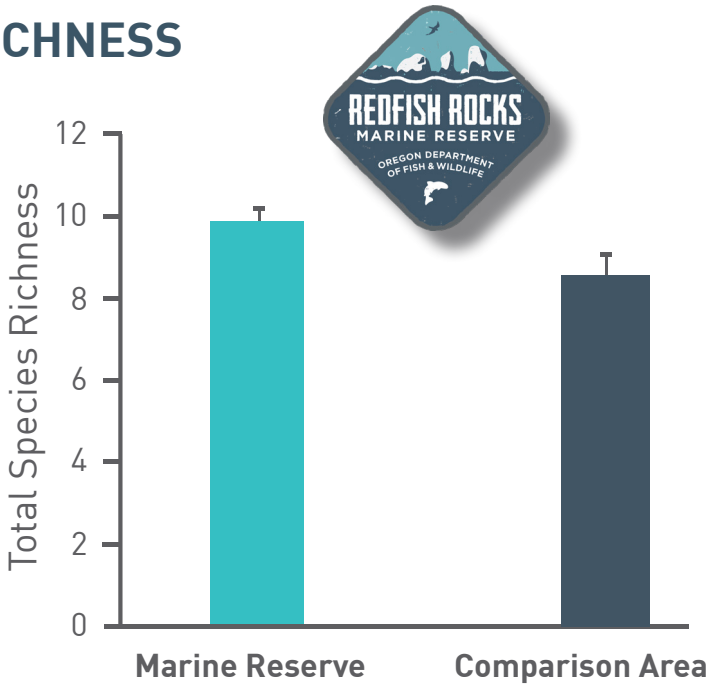
HOW MANY SPECIES WERE THERE?

WHAT SPECIES RICHNESS AND COMPOSITION TELL US

The graphs below summarize the average species richness (number of different species observed) and the catch composition for each of the reserves and comparison areas surveyed in 2017. Black Rockfish are the most abundant species observed, but the differing compositions of other species at each reserve underscores that each reserve is unique.

SPECIES RICHNESS





SPECIES COMPOSITION

LEARNING AND ADAPTING: RETURNS OF TAGGED FISH!

A PILOT STUDY IN REDFISH ROCKS

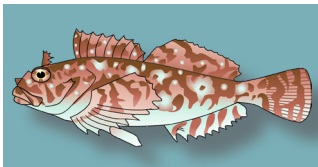
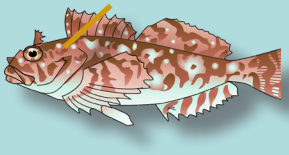
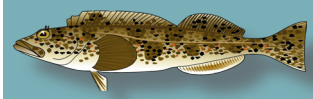
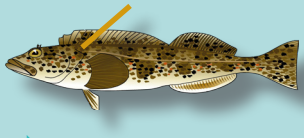
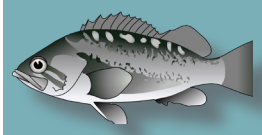
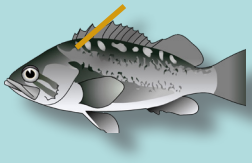
WHY DO WE TAG FISH?

ODFW has been tagging fish in the reserve at Redfish Rocks since 2015 to help us understand how well fish survive after being caught and released during our longline sampling. Tagged fish also help us understand if fish are moving in and out of the reserve. We use floy tags, which consist of a long strip of yellow plastic, that are visible on the outside of the fish so anyone can see them. Each tag has a unique ID number as well as ODFW's contact information - and fetch a $100 reward if returned to ODFW!

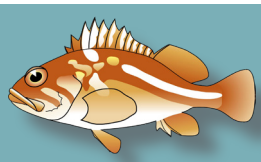
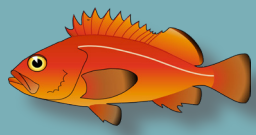
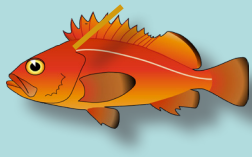
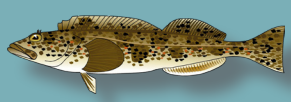
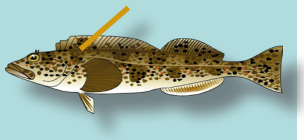
HOW MANY FISH HAVE WE RECAUGHT?

To date we have tagged 988 individual fish from 17 species. We have recaptured 6 fish (including 3 this year) for a return rate of 0.6%. An interesting fact - all 6 of the recaptured fish were caught in the exact same sampling cell they were originally tagged in. We've recaptured fish in 2015 and 2017, but didn't have any recaptures during the 2016 field season.

2015 RECAPTURED FISH

ORIGINAL CAPTURE		RECAPTURE
 **CABEZON** Size: 62cm Survey: Hook-and-Line Date: 5/12/2015	21 DAYS + 0 cm	 62cm Longline 6/02/2015
 **LINGCOD** Size: 67cm Survey: Longline Date: 6/2/2015	123 DAYS + 1 cm	 68cm Hook-and-Line 10/3/2015
 **BLACK ROCKFISH** Size: 43cm Survey: Longline Date: 5/12/2015	145 DAYS + 2 cm	 45cm Hook-and-Line 10/4/2015

2017 RECAPTURED FISH

ORIGINAL CAPTURE		RECAPTURE
 **COPPER ROCKFISH** Size: 35cm Survey: Longline Date: 7/12/2016	443 DAYS + 5 cm	 40cm Longline 9/28/2017
 **YELLOWEYE ROCKFISH** Size: 35cm Survey: Hook-and-Line Date: 7/12/2016	443 DAYS + 4 cm	 39cm Longline 9/28/2017
 **LINGCOD** Size: 61cm Survey: Hook-and-Line Date: 6/10/2016	445 DAYS + 2 cm	 63cm Longline 8/29/2017

WHAT HAVE WE LEARNED?

Through this pilot study we've found our longline sampling to be a successful catch and release method. We've also seen that our recaptured fish are growing in size and are showing limited movement. We hope to continue tracking fish growth and movement as we continue our long-term monitoring of the reserve.