



HEALTHY OCEAN =

HEALTHY COMMUNITIES

by Jody Paterson

In the villages where University of Victoria biologist Natalie Ban works on BC's central coast, Indigenous Elders tell stories of the 80 cm-long yelloweye rockfish they once caught routinely. These days, the fish are half that size.

The stories are indicators of a species in serious decline, says Ban. But federal fisheries managers can't base decisions solely on anecdotal information. So, Ban and her research team partnered with First Nations to take those stories and transform them into the kind of data Fisheries and Oceans Canada (DFO) can use.

Further south in the Salish Sea, yelloweye and other rockfish species are already off limits to commercial fisheries. But recreational fishing continues. Research by one of Ban's students has fueled community initiatives to raise awareness among anglers of extensive Rockfish Conservation Areas around the Gulf Islands.

Community engagement is a hallmark of Ban's research method, and a critical element for ensuring that the ocean's diversity and bounty will be there for future generations of British Columbians to enjoy.

"My interest is in the future of the ocean and

the people who rely on its resources—the coastal communities," says Ban. "It's the intersection of biodiversity conservation and the health of human communities that interests me the most."

Ban's partnership with the Central Coast Indigenous Research Alliance has helped four coastal First Nations translate what they already know from their Elders' stories into statistics that federal authorities can recognize as data.

The research focused on the dwindling size of rockfish over time, and reduced availability of Dungeness crab. "The interview data showed declines in size and catches," says Ban of the project. "These data have opened the door to more discussions between the First Nations and DFO. The project succeeded because the research partnered with the people who live there. It helped to empower their knowledge."

The research project in the Salish Sea began in 2013, when one of Ban's master's students set out to measure the compliance of recreational anglers with federal rockfish conservation efforts in place around the Gulf Islands for almost a decade. After interviews with 300

recreational anglers, Ban and her students found that 12 percent of anglers were using illegal gear, such as 1/2-inch mesh nets, which are not allowed. The research also found that 12 percent of anglers were using illegal gear, such as 1/2-inch mesh nets, which are not allowed. The research also found that 12 percent of anglers were using illegal gear, such as 1/2-inch mesh nets, which are not allowed.

Rockfish. PHOTO: SCOTT STEVENSON