BACKGROUNDER

# ONE CHANGE, TWO WINS

## How adding lights to trawl nets can help eulachon and B.C.'s shrimp fishery

Photo: Vance Whyte

**Goal: The B.C. shrimp fishery would like to further reduce eulachon bycatch by using LED lights along the opening of trawl nets.**

"I've been fishing shrimp for 40 years. After my experience with using lights in the trial I think it should be illegal to fish without lights."

Vance Whyte, shrimp fisherman and captain of trial vessel.

### Conservation status of eulachon:

The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) recognizes eulachon as Endangered (Fraser River and Central Pacific Coast populations) and Special Concern (Nass/Skeena population).

### Culturally important for First Nations:

Eulachon, also referred to as salvation fish and candlefish because of their high oil content, are historically and currently an important species for many coastal First Nations. A National Geographic story explains the significance of Salvation Fish.

### U.S. research shows benefits of light use:

A recent study from Oregon found that LED lights attached to shrimp trawl nets reduced eulachon bycatch by 91 per cent. The entire Oregon fleet is now fishing using these lights, and they will likely be implemented in Washington State's shrimp fisheries as well.

### Fishing with lights isn't permitted in Canada:

Use of lights on fishing gear is illegal in Pacific waters under the Pacific Fishery Regulations: s.8. (1) *No person shall use torches or artificial lights in any manner to attract or repel fish other than squid.*


# SEE THE VIDEO
## bit.ly/eulachonLEDnet

**One boat, two simultaneous nets**

Above, divided hopper. Below, full sorted fish catch.

## NO LIGHTS

## WITH LIGHTS

Courtesy of Oregon Department of Fish and Wildlife and Pacific States Marine Fisheries Commission, 2014

## Does your First Nation or organization support the request to change the Pacific Fishery Regulations to allow fishing with lights to reduce bycatch of eulachon in the shrimp fishery?

Please contact Scott Wallace at the David Suzuki Foundation to add your organization or nation's name to the attached letter addressed to the Regional Director General.

Scott Wallace, swallace@davidsuzuki.org, 778-558-3984

Contact Lorne Clayton, PCSCA, (250) 658-0179
email: clayton@ieccorporate.com for questions about the shrimp trawl industry.

## British Columbia Shrimp Industry Snapshot

**Species targeted:**
smooth pink shrimp, *Pandalus jordani*
sidestripe shrimp, *Pandalopsis dispar*
spiny pink, *Pandalus borealis*

**Number of licences:** 237

**Commercial licences available:** 213

**Commercial licences fished 2014:** ~50

**First Nations licences:** 23

**Number of First Nations licences fished:** 0

**Average landings (2009-2014):** 1.3 million pounds

**Primary management tool:** Stock assessment in 36 Shrimp Management Areas is based on abundance estimates derived from annual or biannual shrimp surveys.

## We need your support to change regulations:

Pacific Coast Cooperative Shrimpers' Association and the David Suzuki Foundation are asking for your support for a change to the Pacific Fishery Regulations to allow fishing with lights to reduce eulachon bycatch.

How did we get here? Over the past 15 years the B.C. shrimp trawl industry has taken steps to reduce eulachon bycatch. Fisheries and Oceans Canada also aims to "minimize eulachon bycatch to the extent possible".

Among those steps are closing areas, requiring grates to limit bycatch on trawl nets and a fleet-wide mandatory cap, or Eulachon Action Limit (EAL), on eulachon catch. These measures have reduced eulachon caught in the shrimp trawl fishery to less than 1,000 kilograms per year, and in 2013-14 eulachon bycatch was down to 200 kilograms.

So why bother with lights if the eulachon catch is so low? It's the next step to protect eulachon and support the shrimp fleet at the same time. The fleet only caught 2.3 per cent (1.1 million of 47.8 million pounds) of the allowable shrimp catch in 2014. Due to healthy stocks and improving market, the catch in 2015 is already at 8 million pounds. Increased effort means increased potential to interact with eulachon. The use of lights greatly reduces the likelihood of interacting with eulachon on every single tow.

## Early success during Canadian trial:

In late 2015 the shrimp industry received a scientific permit from Fisheries and Oceans Canada to test the use of artificial lights on three vessels in the B.C. shrimp fleet. While this was not a scientific study, it did test the practicality and effectiveness of the LED lights. Fishermen who trialed these lights said they do not want to go back fishing without lights as they were blatantly effective.

## Shrimp from the Pacific coast are a sustainable seafood choice:

Canada's Pacific shrimp are sustainable choices for consumers, unlike red-listed shrimp products popular in grocery stores.

Photo: Paul Colangelo

David Suzuki Foundation
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