

Traditional harvest of Arctic lamprey in the lower Yukon River, Alaska



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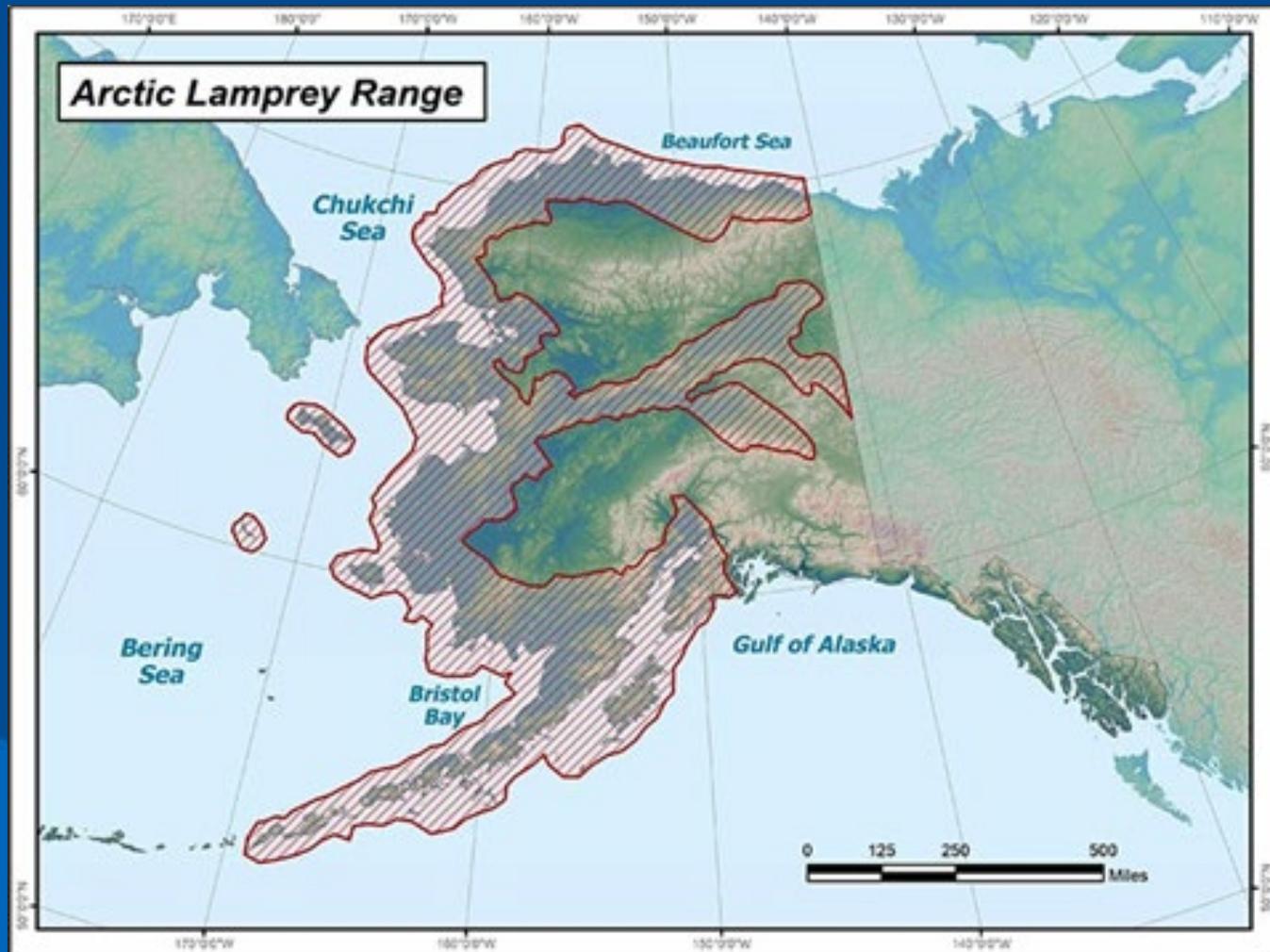
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Division of Commercial Fisheries

Overview

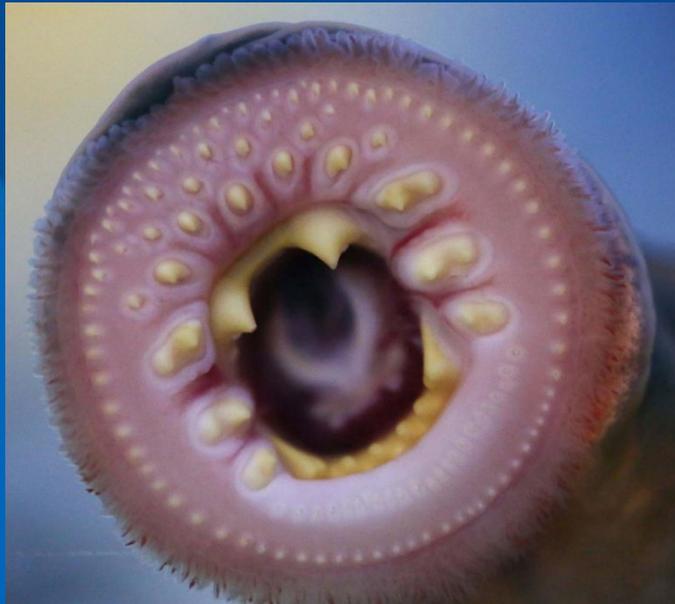
- Life History
- Monitoring
- Harvest
- Concerns/Insights



Alaskan Distribution

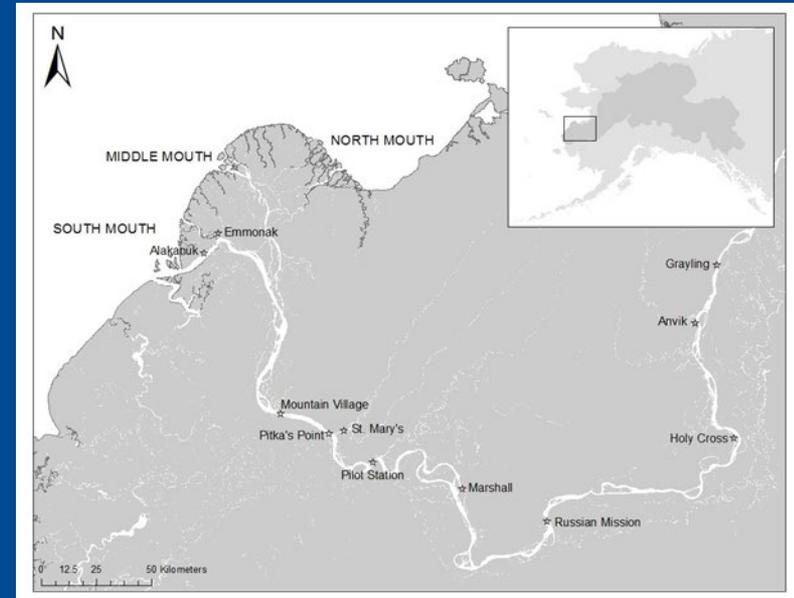


Adult Arctic Lamprey



Monitoring & Harvest

- Test Fishery
 - Monitoring (ADG&F)
 - YDFDA
- Subsistence Harvest
 - Traditional harvest
- Commercial Harvest
 - Kwik'Pak Fisheries LLC



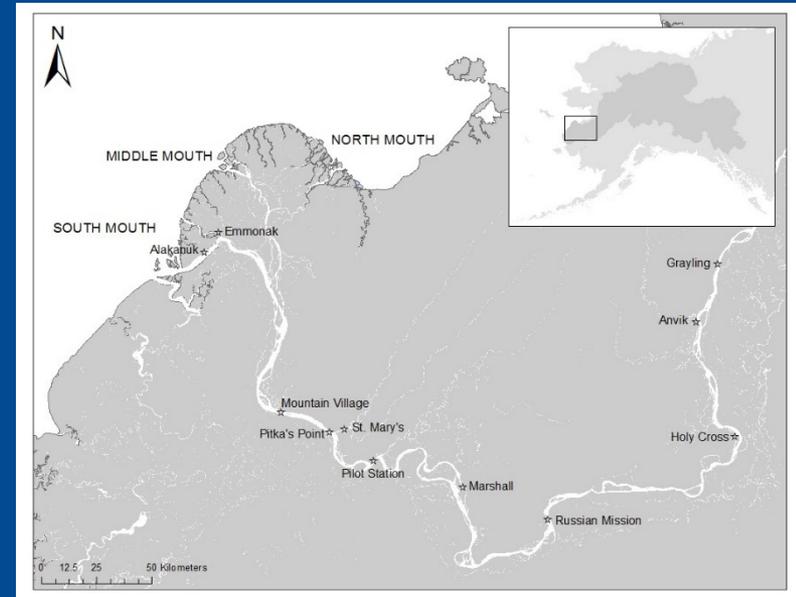
Test Fishery

- Monitoring Efforts (2013-present)
 - ADF&G and YDFDA
- Test Fishing Sites
 - Lamprey presence/run timing
- Process
 - Fyke nets (6-12 per night)
 - Standardized sites + new sites



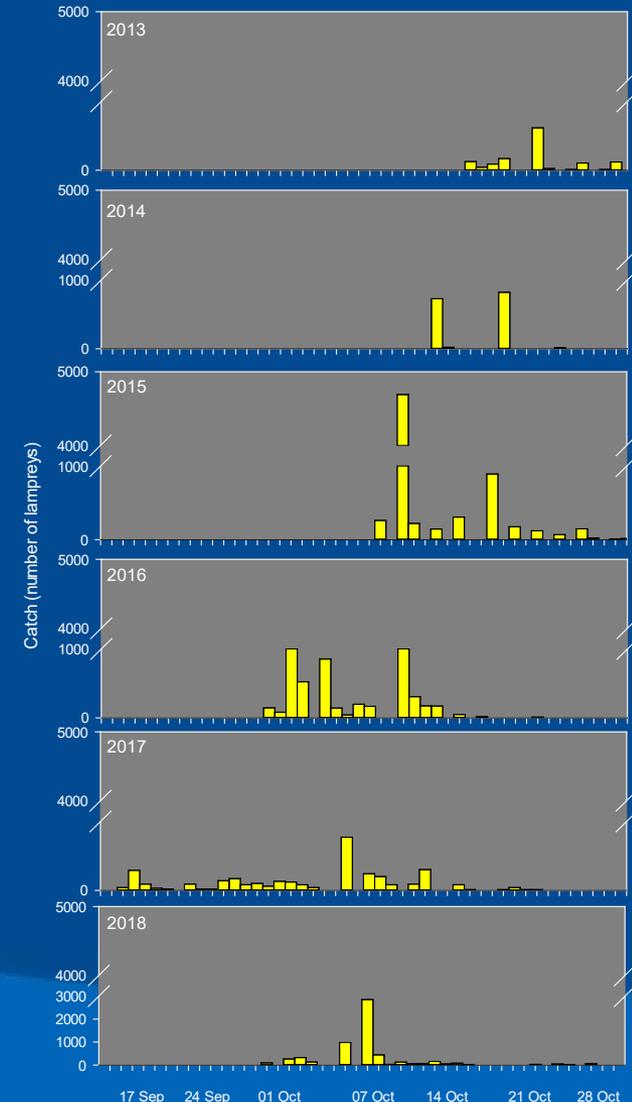
Test Fishery

- Sampling
 - Lower Yukon River
 - Fyke nets (24-hr sets)
 - Mid-September – Late October
 - Donations (subsistence), sold (commercial), tagged and released, or research



Test Fishery

- Run Timing (2013 through 2018)
 - Are Arctic lamprey starting their upstream migrations earlier?
 - Are samplers better at detecting the start of the Arctic lamprey migration?
 - Have changing environmental conditions or harvest levels changed run timing?

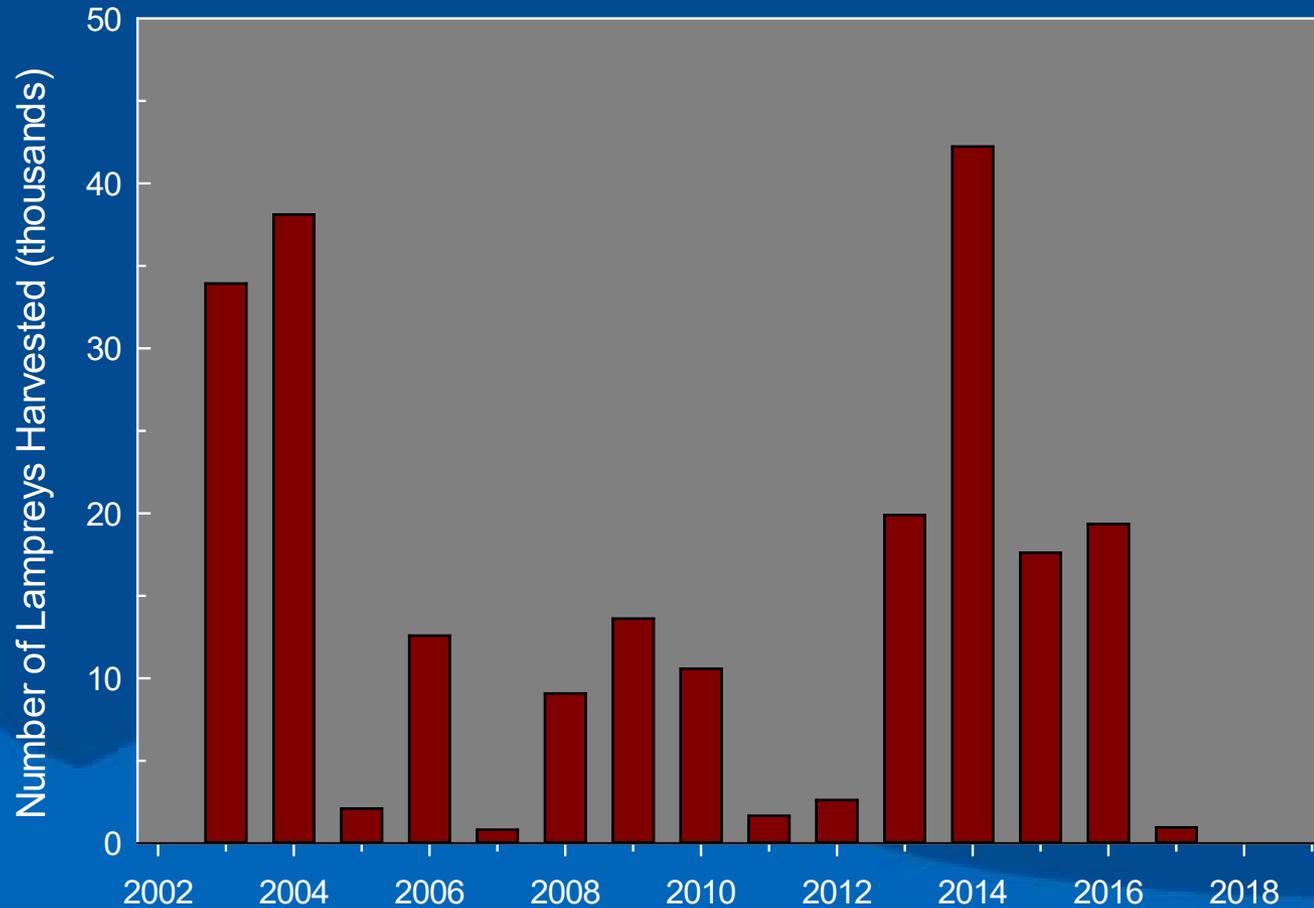


Subsistence Fishery

- Subsistence Harvest
 - Historically important
 - Variable number of fishers (up to 38) and harvest (803 - 42,237 lampreys)
 - TEK – St. Marys
 - Run usually at end of October
 - Total fishing time usually short
 - Holes cut in the ice along riverbank where depths are shallow (2')
 - Only fish the right bank (no left bank)



Subsistence Fishery



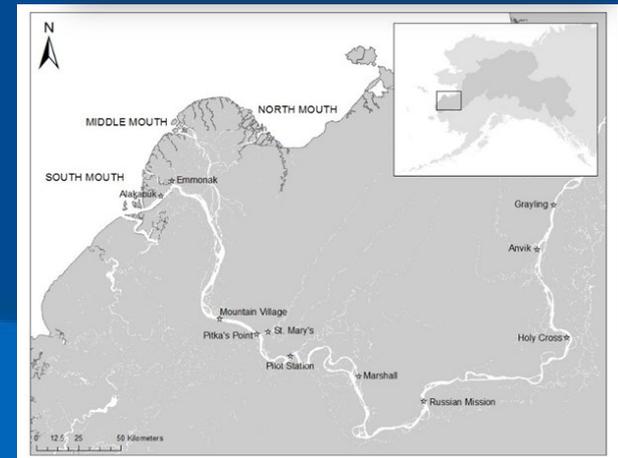
Commercial Fishery

- Commercial Harvest (Since 2003)
 - Commissioner's Permit (ADF&G)
 - Kwik'pak Fisheries, LLC
 - Harvest Allowance
 - 5,000-49,080 lbs annually
 - Timing (01 Oct – 15 Dec)

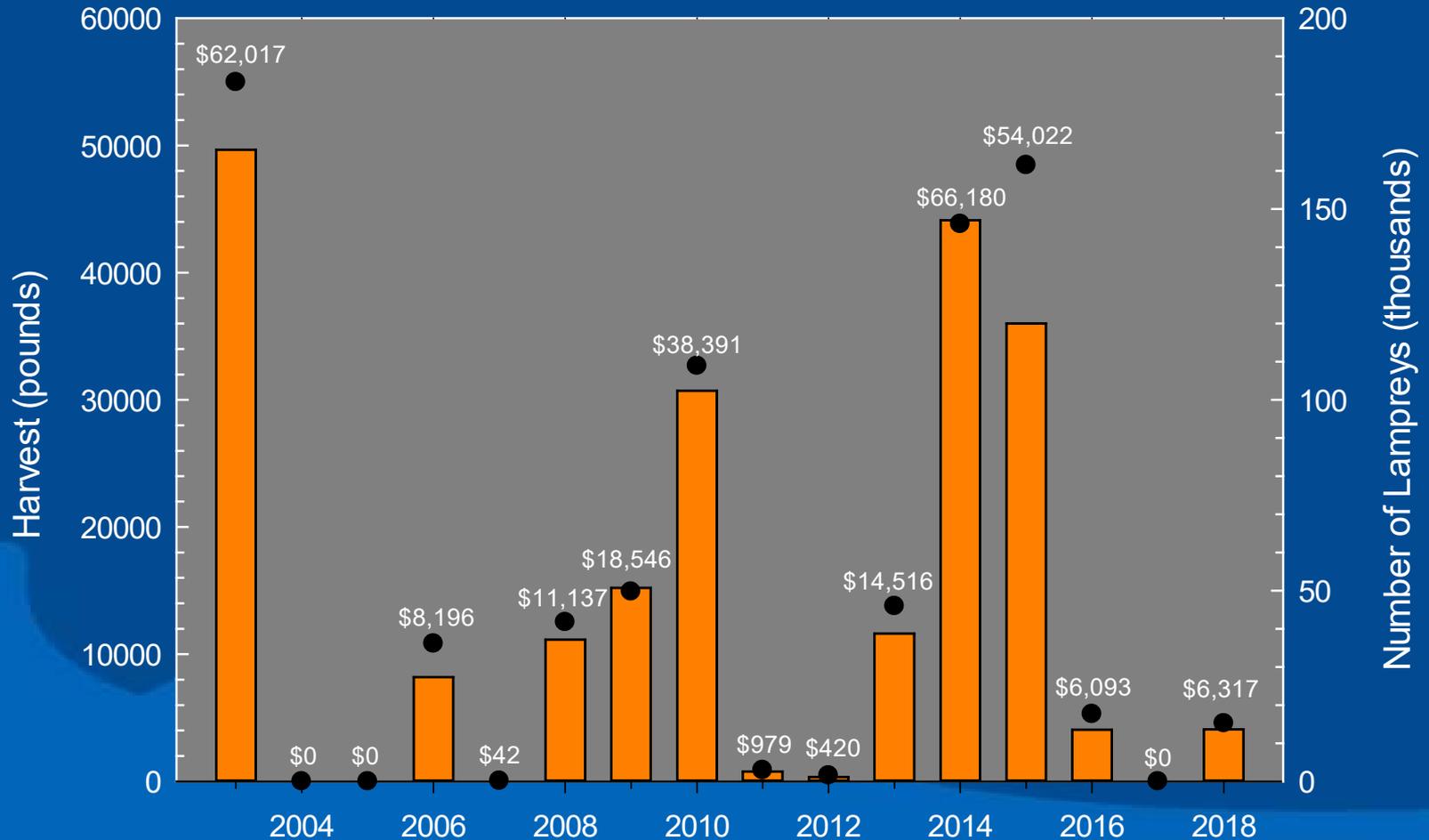


Commercial Fishery

- Commercial Harvest Participation
 - FW Commercial Permit
 - Gear types
 - Hand dip net, “eel” stick, fyke net, hoop net
 - One per permit holder
 - Buying stations
 - Mtn Village & Grayling
 - \$1 - \$1.50 per pound
 - Additional income for salmon fishers

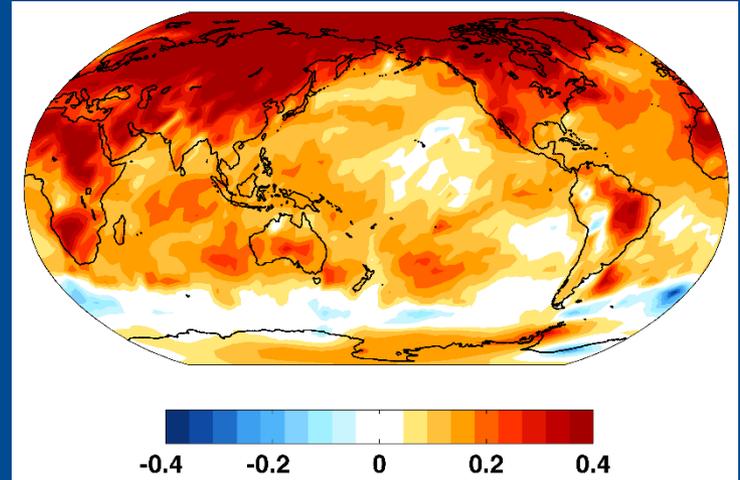


Commercial Fishery



Concerns/Relevance

- Climate change
 - Warming
 - Quality and quantity
- Harvest
 - Sustainability
- Food-web dynamics
 - Prey availability
 - Predation



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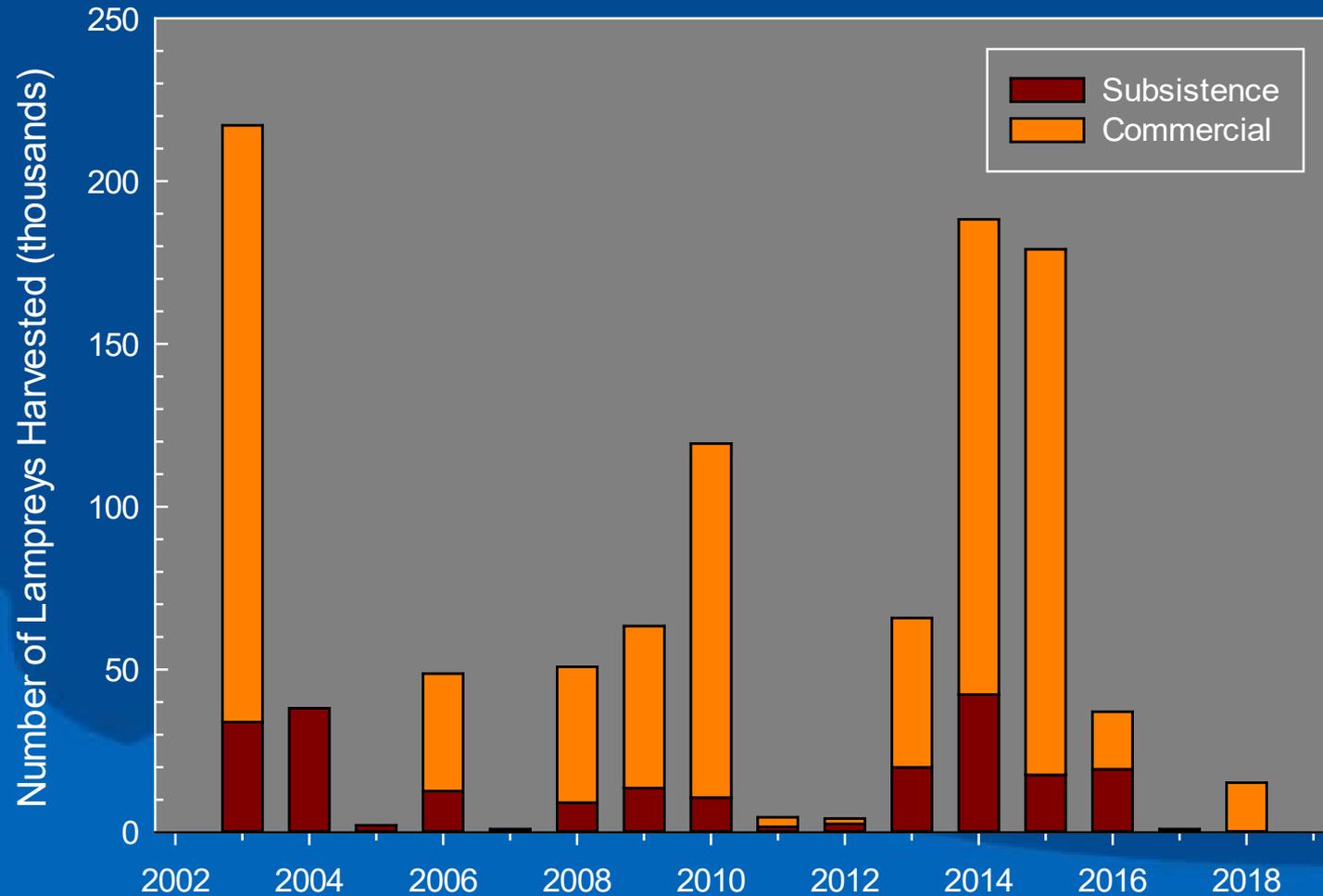
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Thanks!

Subsistence and Commercial Harvest



Life History and Ecology

- Distribution
- Larvae
- Macrophthalmia
- Adults



Life History and Ecology

- Distribution
- Larvae
- Macrophthalmia
- Adults
- Paired Species



Arctic Lamprey



Grist / Shutterstock

SCIENCE

It's raining lampreys — time to leave this terrifying planet

By Amelia Urry on Jun 11, 2015

Why is it raining lampreys in Alaska?

BY SARAH KEARTES JUNE 10 2015



FISHY

Yes, It's Really Raining Vampire Fish in Alaska

Four eel-like fish with jaws containing circles of teeth and multiple tongues have, in fact, fallen from the sky in Alaska. Officially known as the Arctic lamprey, they're a yearly occurrence.



G. Clay Whittaker | Updated Jul. 12, 2017 4:12PM ET / Published Jun. 12, 2015 5:15AM ET



Birds are dropping these super creepy fish on people in Alaska

Sarah Keartes, Earth Touch News Network Jun 12, 2015, 6:20 AM

