

Steller's Eiders: The Road to Recovery

How waterfowl Husbandry can support Conservation efforts



Photo By

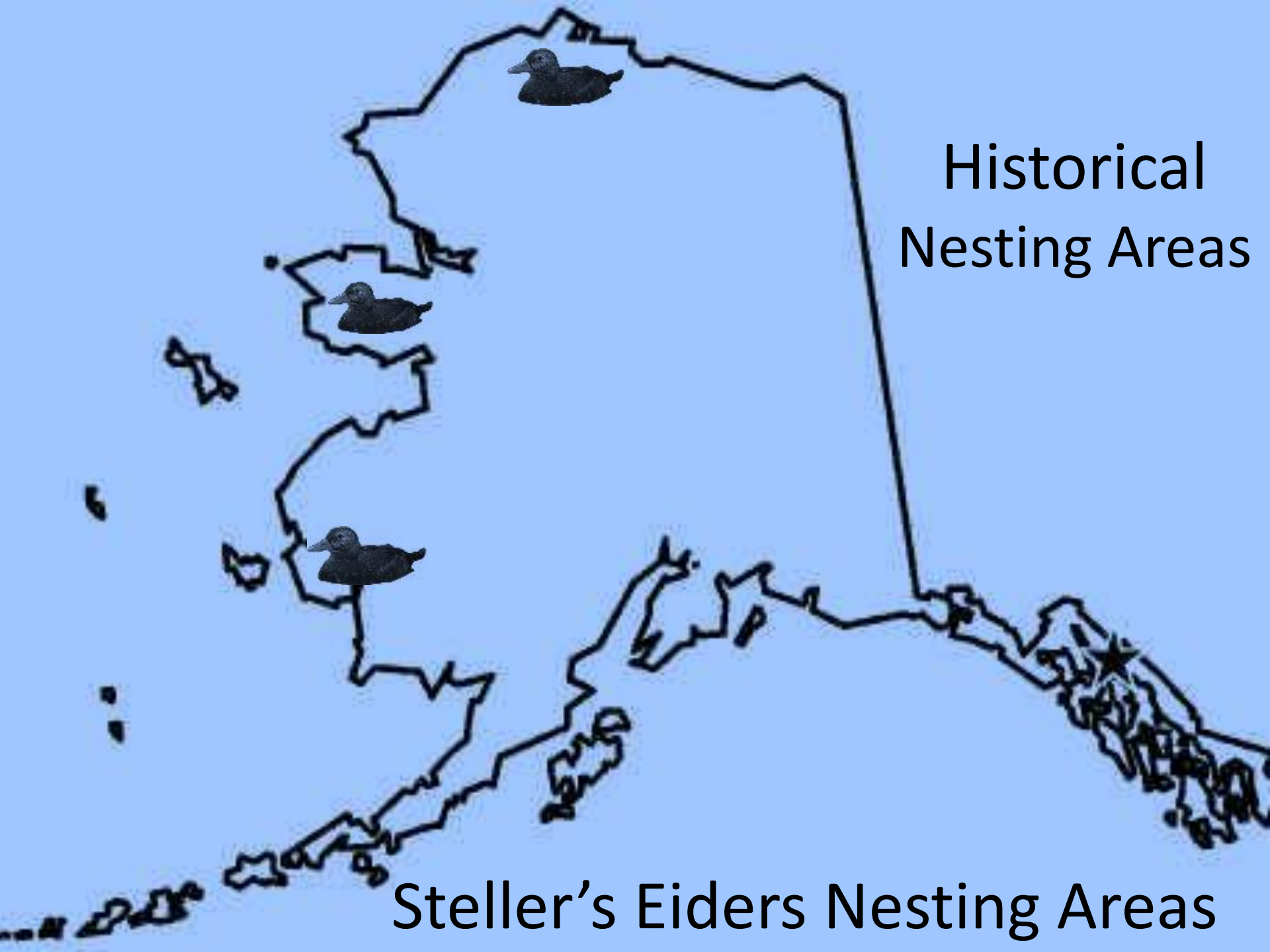
Tasha DiMarzio



- The current population is declining and is believed to be ~150,000 world wide, the majority of these birds nest in Russia.
- Less then 200 breeding pairs nest in Alaska.
- They are the only members of the family Polysticta and are Important part of native tradition and folklore

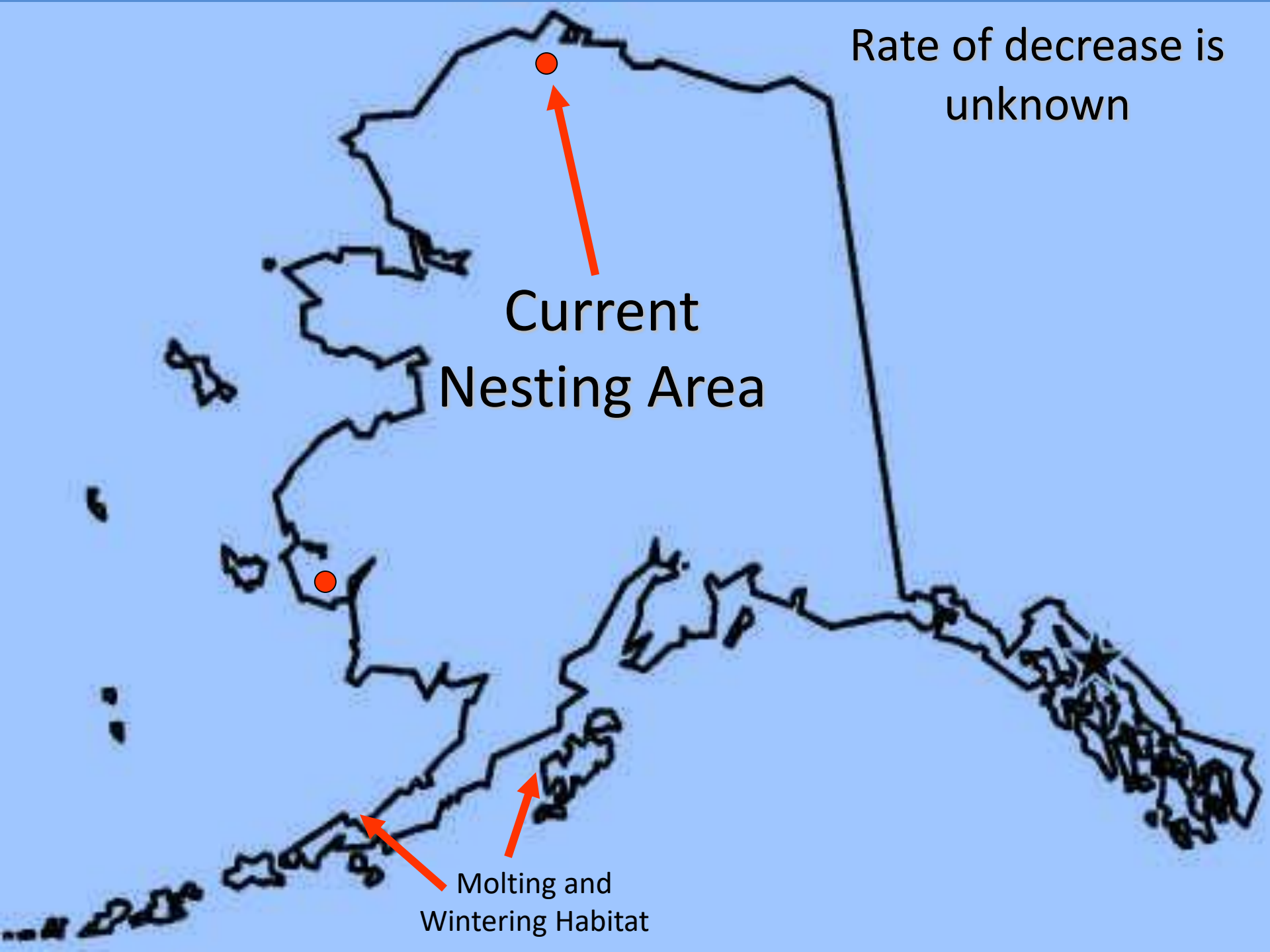


**Steller's eiders listed as threatened species by
USFWS in 1997**



Historical
Nesting Areas

Steller's Eiders Nesting Areas



Rate of decrease is unknown

Current
Nesting Area

Molting and
Wintering Habitat

Steller's Eider Nesting Habitat





Possible Causes and Obstacles of Decline



Predation

Over-Harvesting

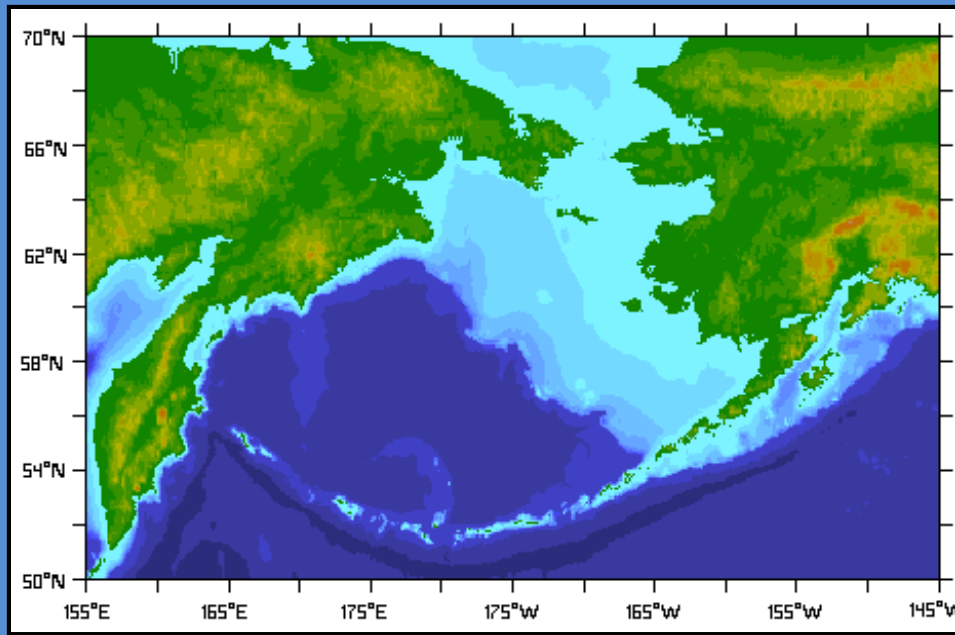


Contaminants and Marine Debris



Environmental Changes:

Rising Seas, Warming Water Temperatures,
and Higher Salinity Levels





Husbandry Support Since 2002:
Steller's Eider Recovery Plan

Moving Towards Reintroduction: Current Husbandry Goals and Objectives



1. Establish a Breeding Flock of Steller's Eiders in captivity

- Refine Incubation Techniques
- Promote Natural Behaviors and Incubation



Behavioral Monitoring of Pairs



Refine Incubation Techniques



Artificial Incubation:
Temperature, Development, and Weight loss trends



Natural Incubation

Embryonic Development





Duckling Growth and Foster Techniques

Eider Reintroduction Pilot Project 2015

How Husbandry Techniques Can be Used in a Field Setting

Yukon-Delta National Wildlife Refuge

Study Area

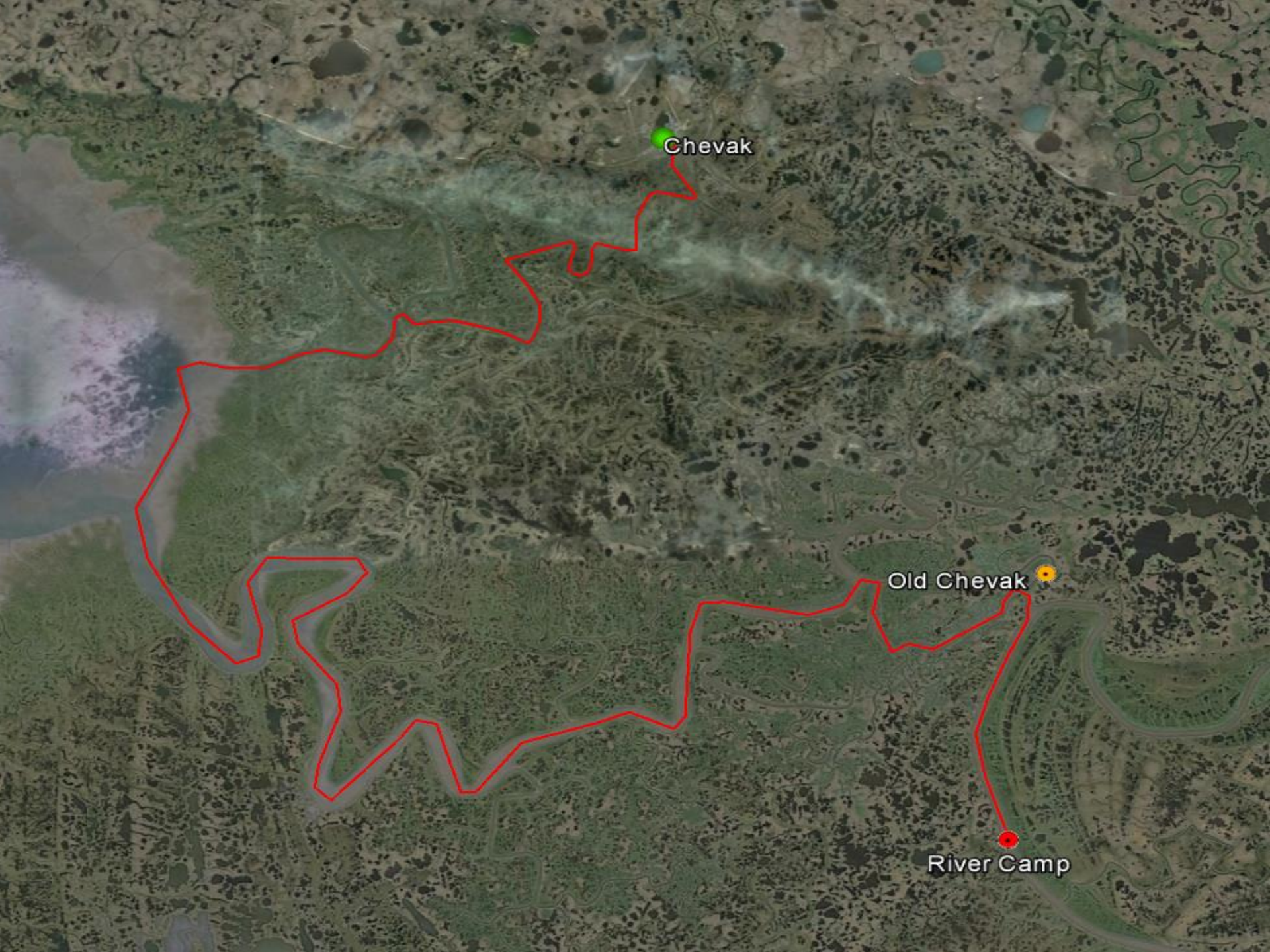


River Camp from the Air



Delta Transportation





Chevak

Old Chevak

River Camp

Getting Around the Delta can be Tricky





Setting up River Camp



Aviary Construction



12 NOPI Hatched in 3 Days



Newly Hatched Ducklings



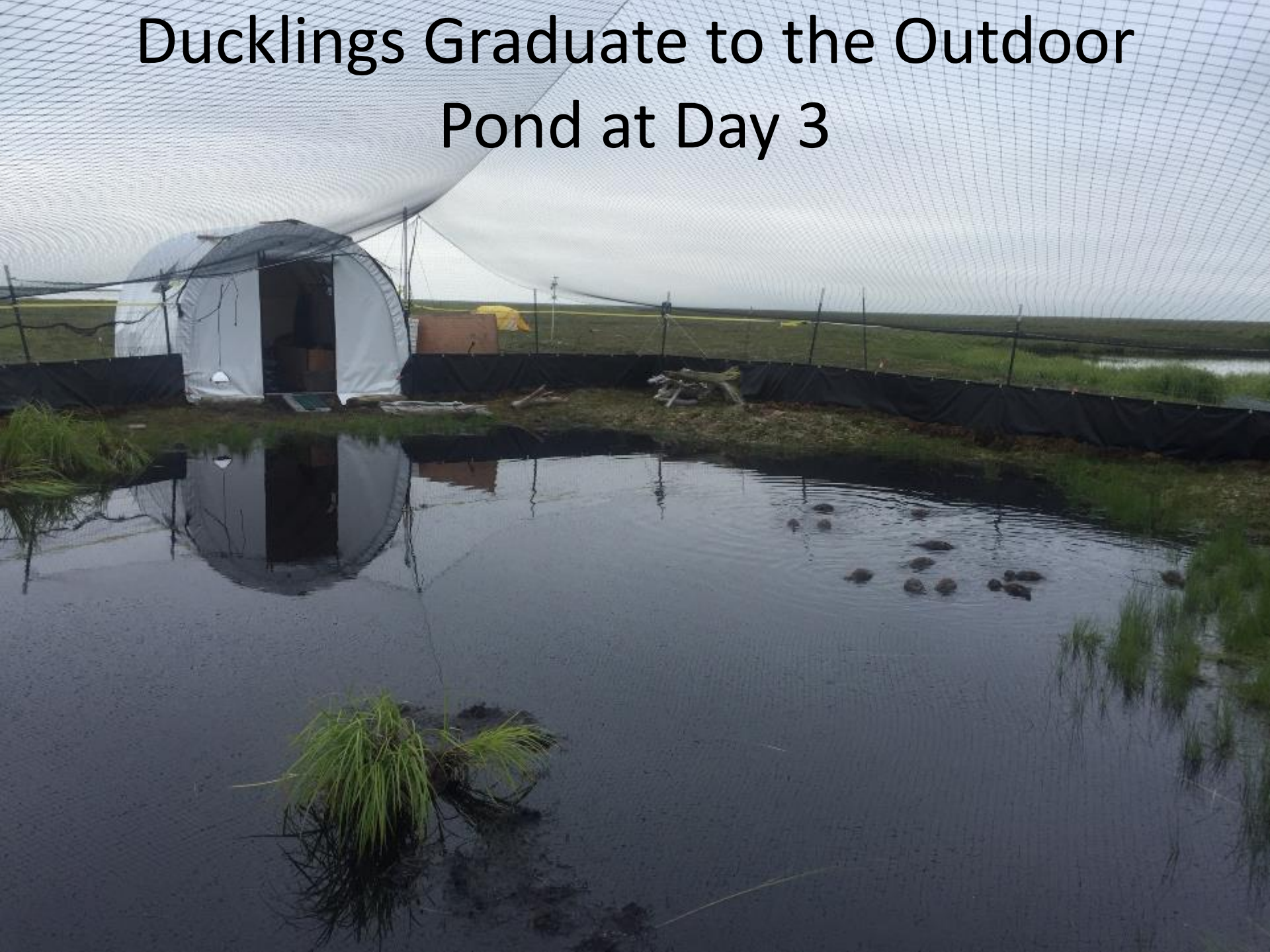


Exhausted Ducklings under the “Hen”

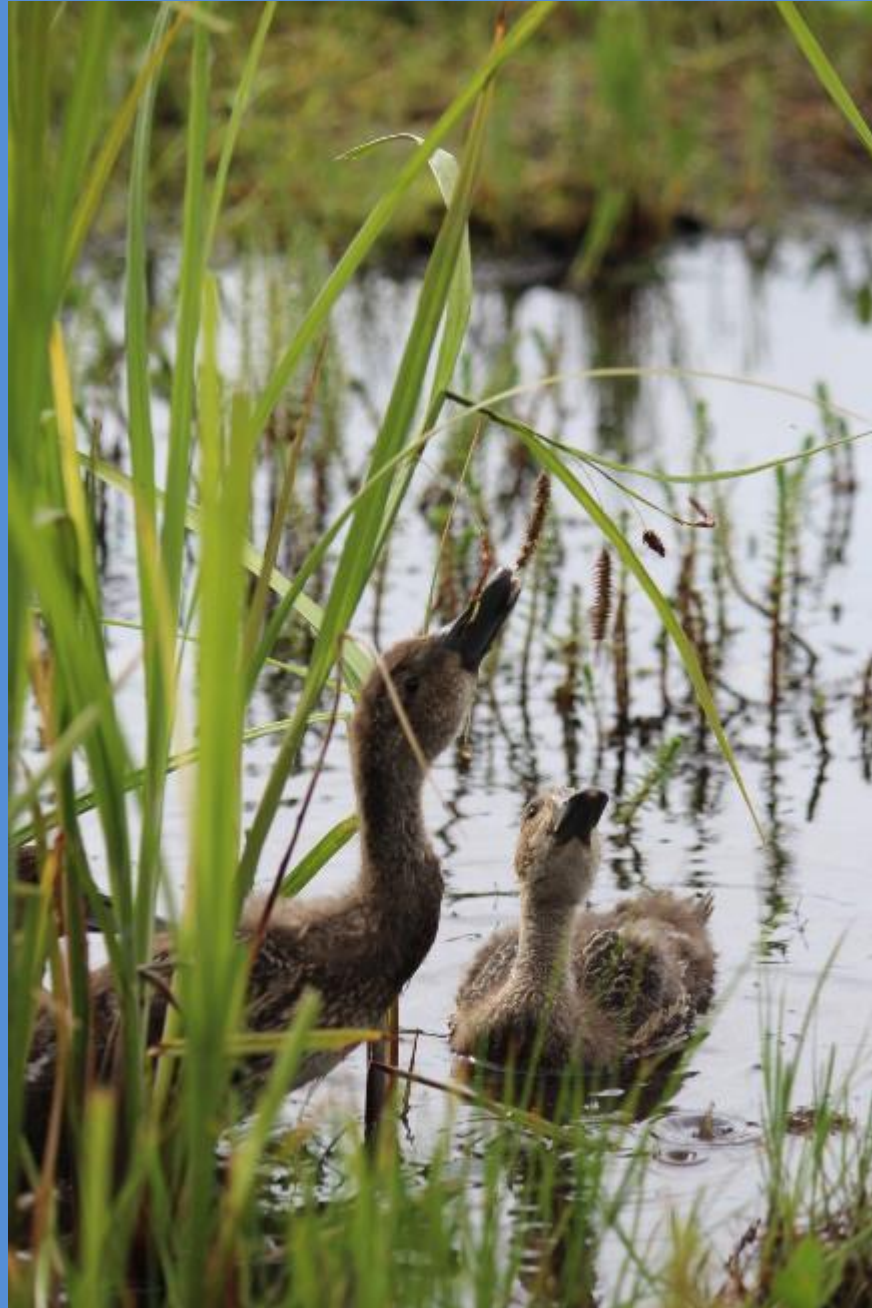
2 Day old Ducklings Hanging Out with “Mom”

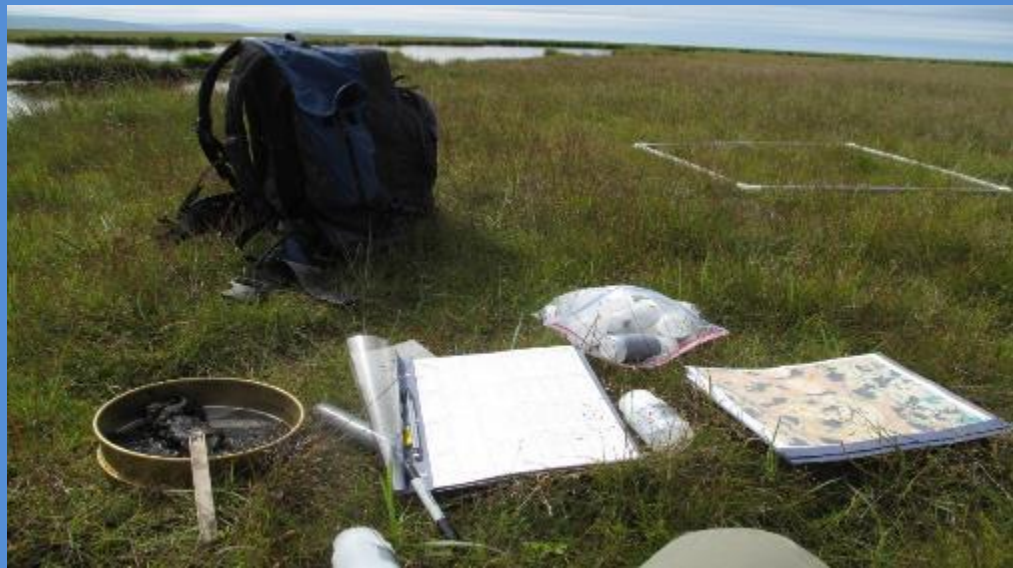


Ducklings Graduate to the Outdoor Pond at Day 3



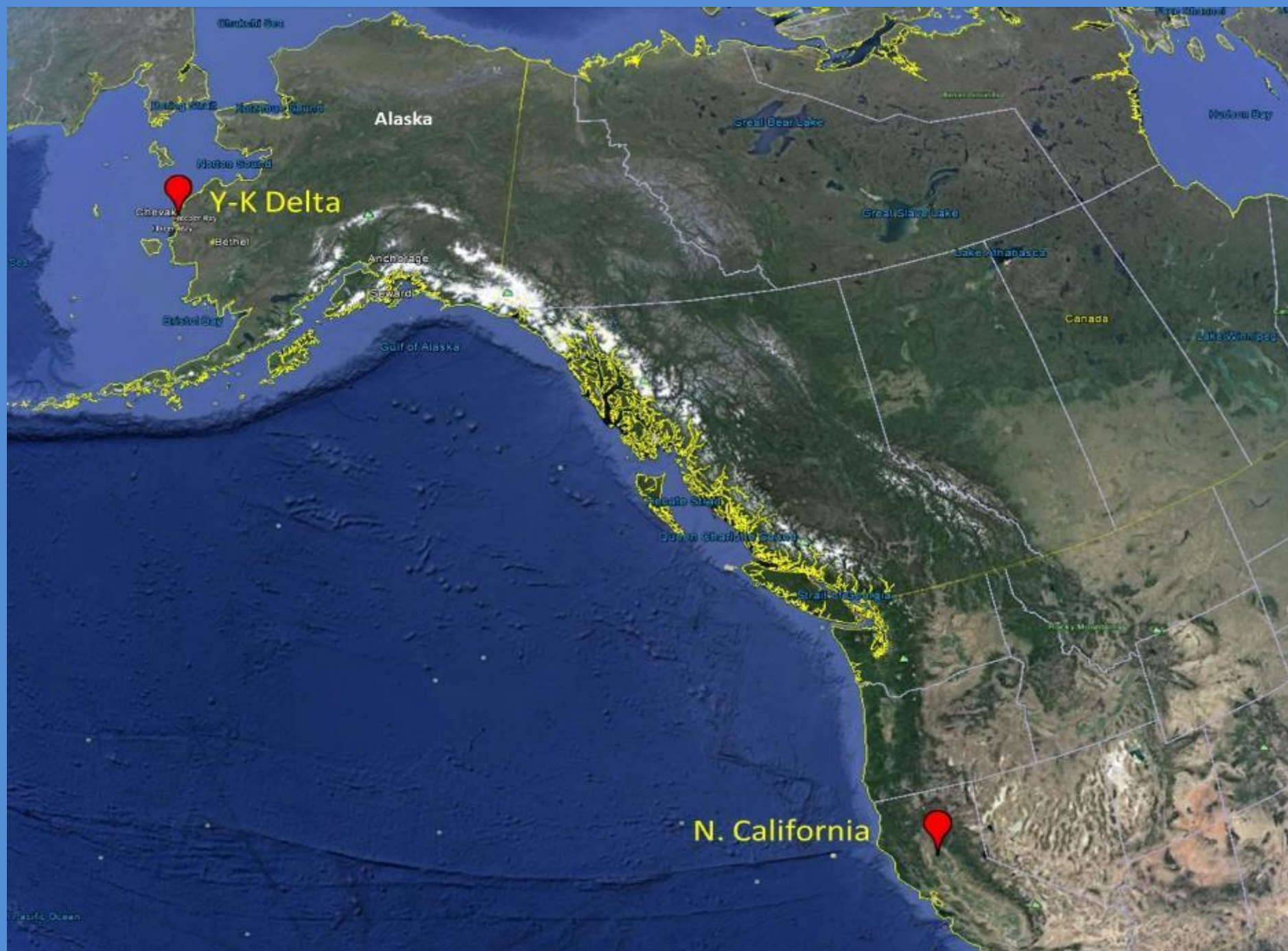
Ducklings Foraging on Carex







NOPI Egg to Release



Planning for 2016 Continues....



It's a Long Hard Road

It Takes a Big Team

Dr. Tuula
Hollmen



Sadie



Caitlin



Nathan



Lizzie



Katrina



Hannah



John USFWS



Micah USFWS

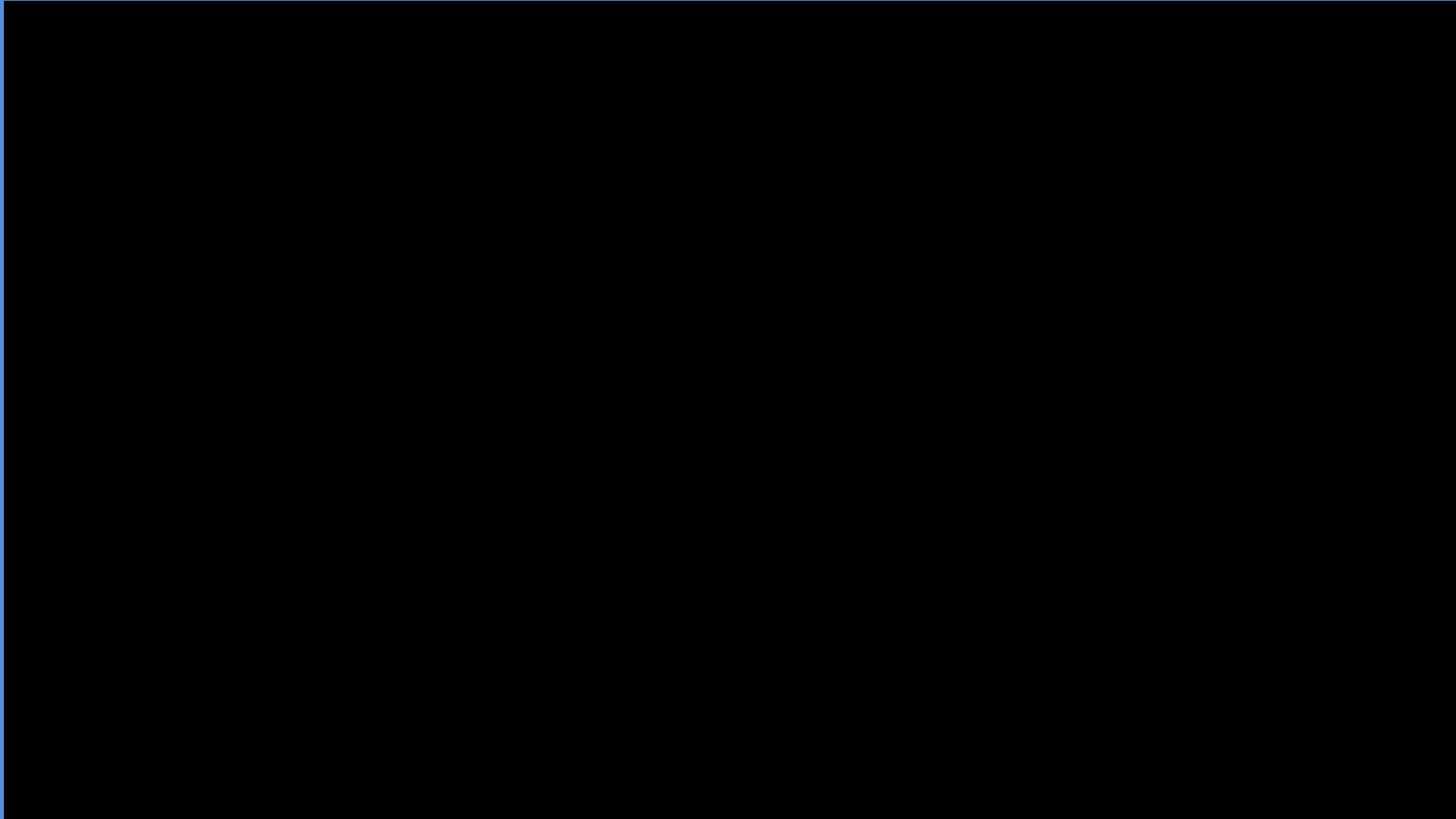


Arnold DCW



Tasha

Eyes on Eiders



Questions?

