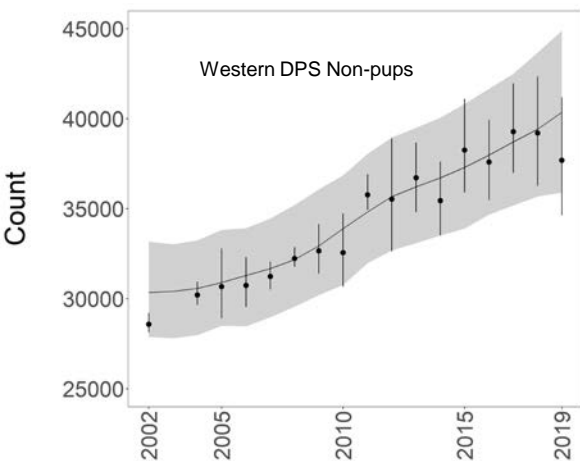


## AFSC Steller sea lion abundance update and plans for 2021

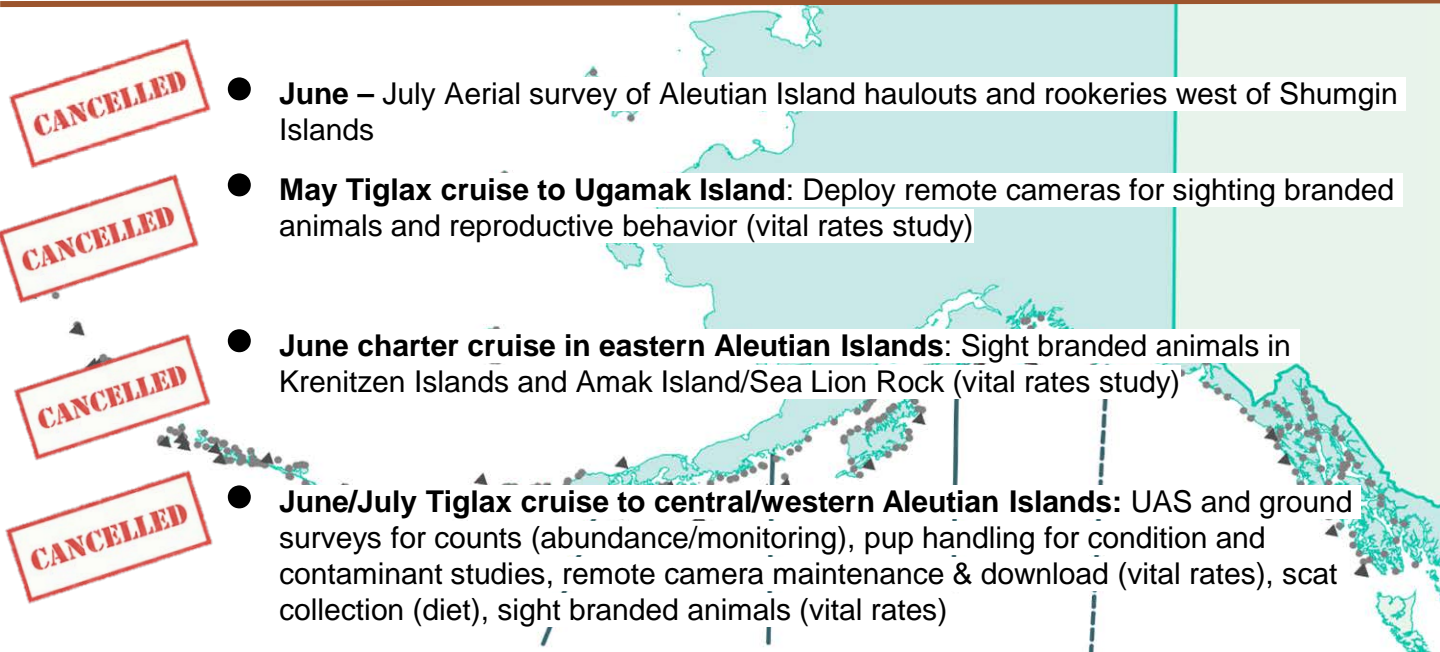
**Tom Gelatt**

Alaska Ecosystem Program, Marine Mammal Lab,  
Alaska Fisheries Science Center, NOAA Fisheries

Feb 4 2020



## 2020 Alaska Field Work Summary – Steller sea lion

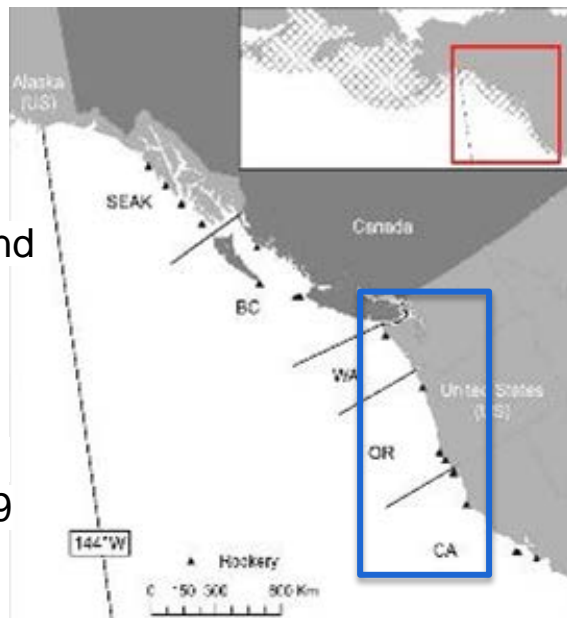


## 2020 West Coast Field Work Summary – Steller sea lion

Completed

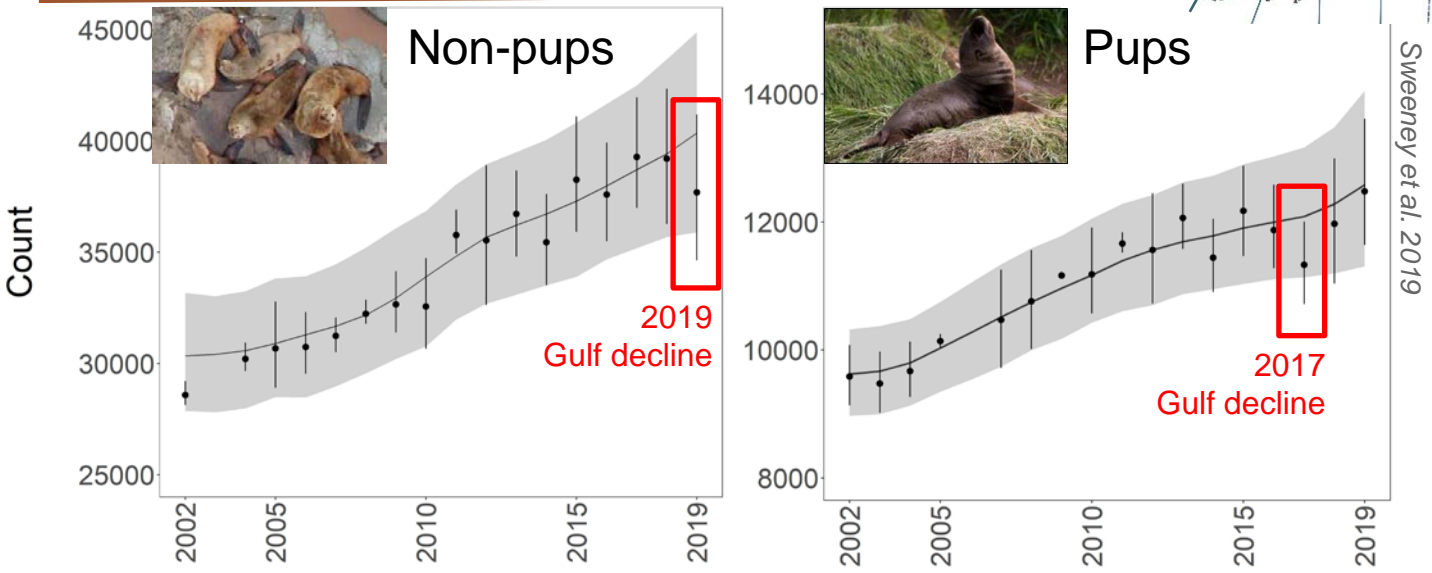
**July/August:** UAS surveys for counts (abundance and monitoring) at WA, OR and CA rookeries and haulouts; resighting of branded Steller sea lions for vital rates.

3,209 pups and 3,814 non-pups counted; WA, OR and CA pup counts stable except Orford Reef, OR increased 29% from 2019





# Western DPS Steller Sea lions 2019 update

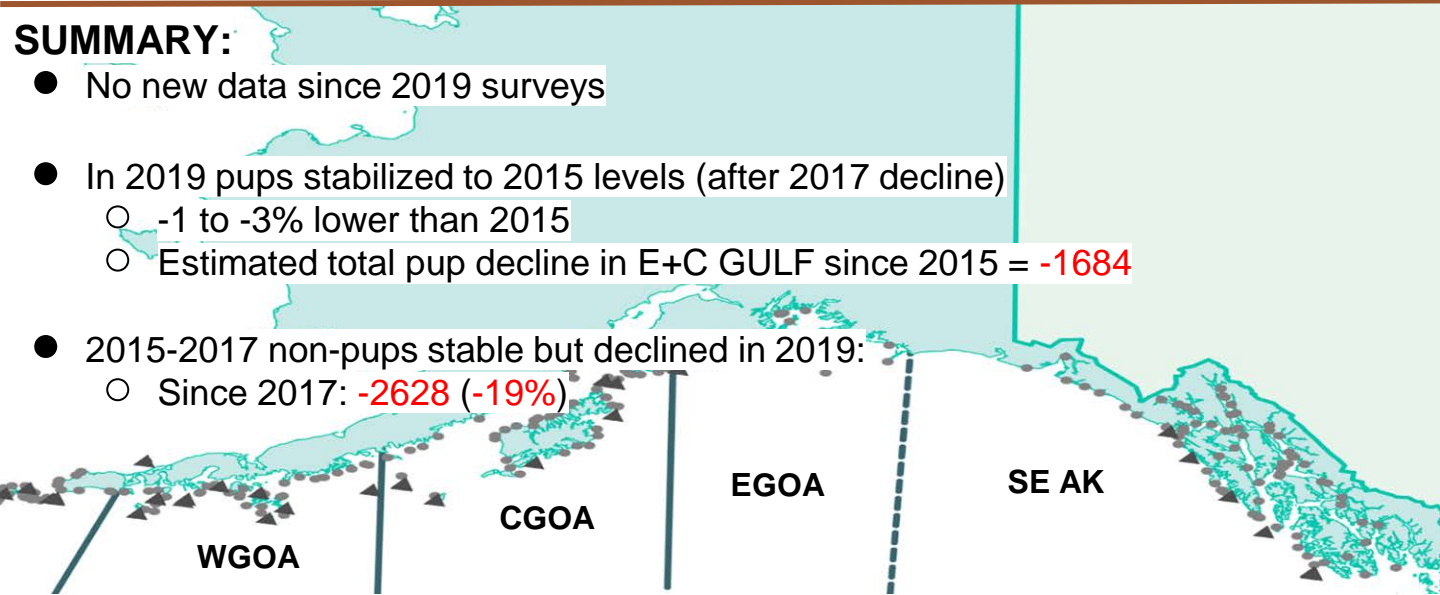


- Increased 1.82%/yr and 1.63%/yr, respectively, since 2002

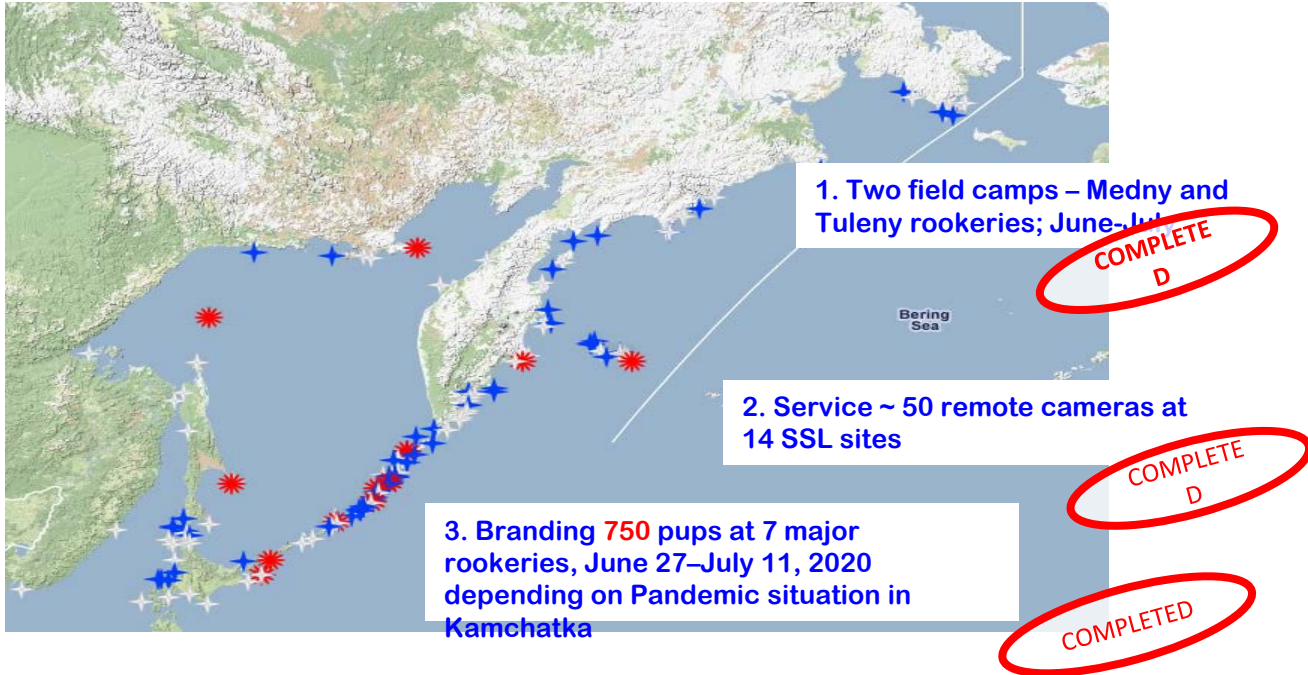
# Gulf of Alaska Steller Sea Lions - Summary

## SUMMARY:

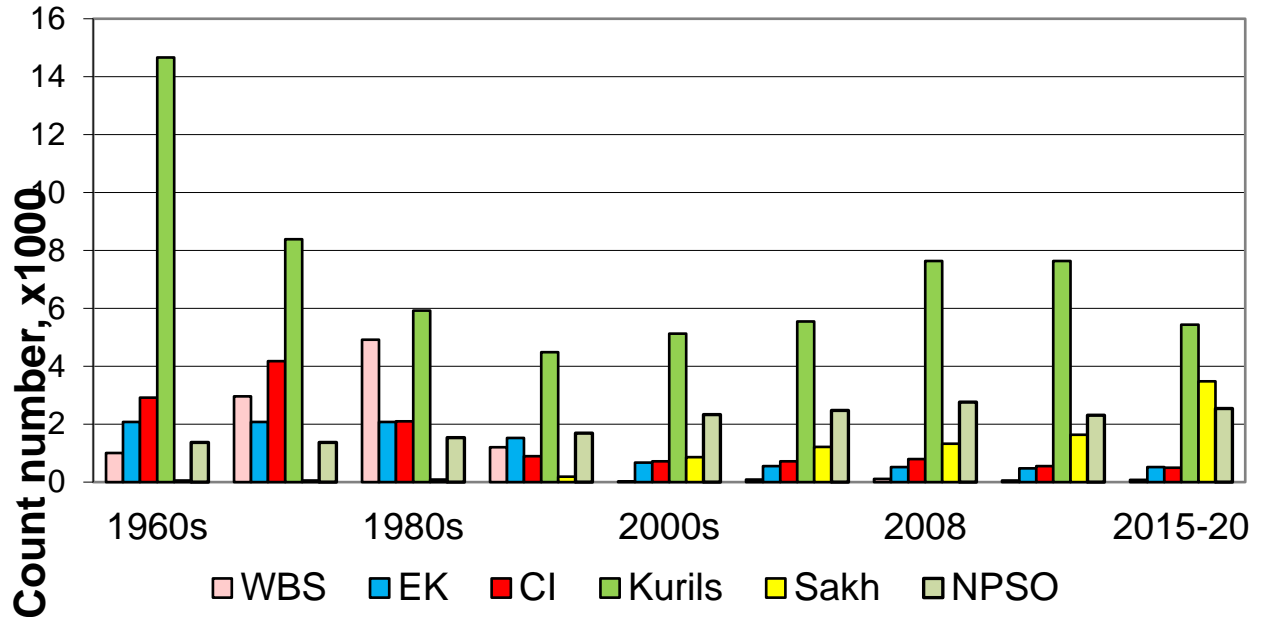
- No new data since 2019 surveys
- In 2019 pups stabilized to 2015 levels (after 2017 decline)
  - -1 to -3% lower than 2015
  - Estimated total pup decline in E+C GULF since 2015 = **-1684**
- 2015-2017 non-pups stable but declined in 2019:
  - Since 2017: **-2628 (-19%)**



SSL Russian Field Research Plan 2020 – North Pacific Wildlife Consulting (NOAA Fisheries funding)



## Steller sea lion total abundance at all Russian rookeries 1960 - 2020



## On Going Projects – Steller sea lion

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- Sea Lion Foraging Behavior – Draft manuscript examining attendance and activity budget data of adult female Steller sea lions.
- Completion of a NOAA Tech Memo summarizing sea lion population trends between 2013 – 2019.
- Sea Lion Health and Condition – Draft manuscript examining pup morphometrics across the range. And collaborative projects with UAF (L. Rea).
- Gulf of Alaska Integrated Modeling Project – Evaluate impacts of Environmental anomalies to SSL using the 2013 – 2016 heatwave as an experiment.
- Development of an AI program to automate the review of remote camera images taken from western Aleutian rookeries.



# 2021 Field Work Summary – Steller sea lion

Pending

Pending

Pending

Pending

Pending

- **June – July Aerial survey of Aleutian Island haulouts and rookeries west of Shumagin Islands – 2021 focus on Gulf of Alaska**
- **May Tiglax cruise to Ugamak Island:** Deploy remote cameras for sighting branded animals and reproductive behavior (vital rates study)
- **June charter cruise in eastern Aleutian Islands:** Sight branded animals in Krenitzen Islands and Amak Island/Sea Lion Rock (vital rates study)
- **June/July Tiglax cruise to central/western Aleutian Islands:** UAS and ground surveys for counts (abundance/monitoring), pup handling for condition and contaminant studies, remote camera maintenance & download (vital rates), scat collection (diet), sight branded animals (vital rates)
- **June/July UAV survey of Walrus Is.** conducted by St. Paul Is. Tribal Government



# 2021 Field Work Summary – Northern fur seal



Pending

Pending

Pending

Pending

- **Pribilof July bull counts:** Counting territorial bulls on rookeries
- **Pribilof Island August Shearing/pup survey:** mark-recapture pup production study, pup weights, dead pup counts, scat collection
- **Pribilof Islands tag resights:** Deploy re-sighters for longer term tag resight on St. Paul and St. George
- **Pribilof Islands September tagging trip:** Tag adult females and pups for demographic studies and to assist St. Paul Tribal Government Eco researchers



