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# Marine Mammal Laboratory Polar Ecosystems Program 2024 Ice seal research cruise



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# Sample and tag seals on the sea ice in the Bering Sea in spring

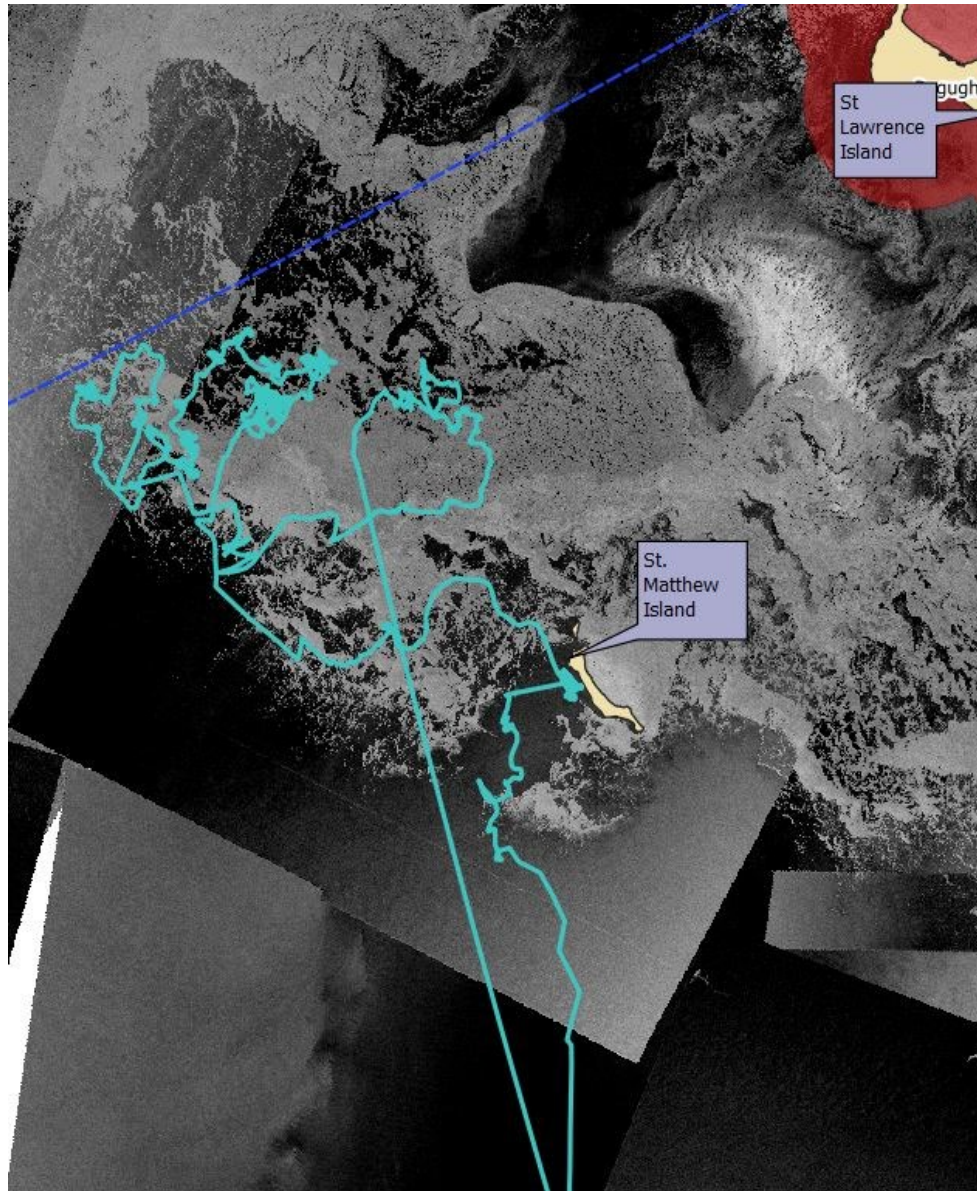




R/V Norseman II  
April 15 – May 26

Dutch Harbor to Dutch Harbor

# Cruise trackline



## Seal captures

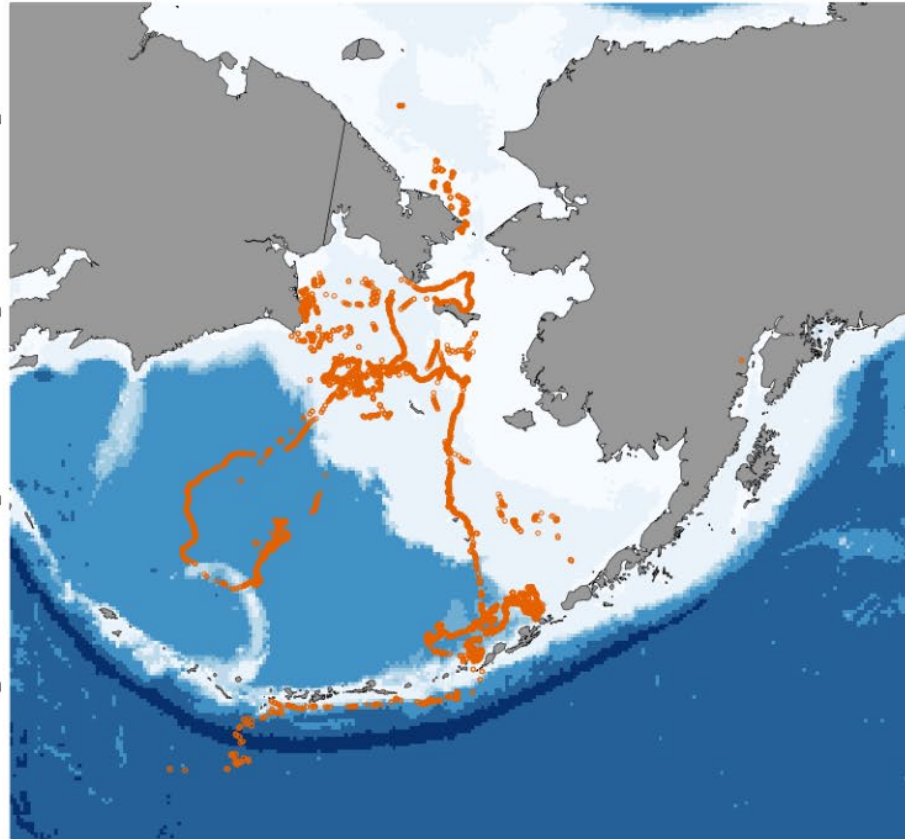
	Ribbon seals	Spotted seals	Total
Adults	6	2	8
Subadults	2	3	5
Young-of-the-year	2	7	9
Pups	1	2	3
Females	7	7	14
Males	4	7	11
<b>Total</b>	<b>11</b>	<b>14</b>	<b>25</b>

## Instruments deployed

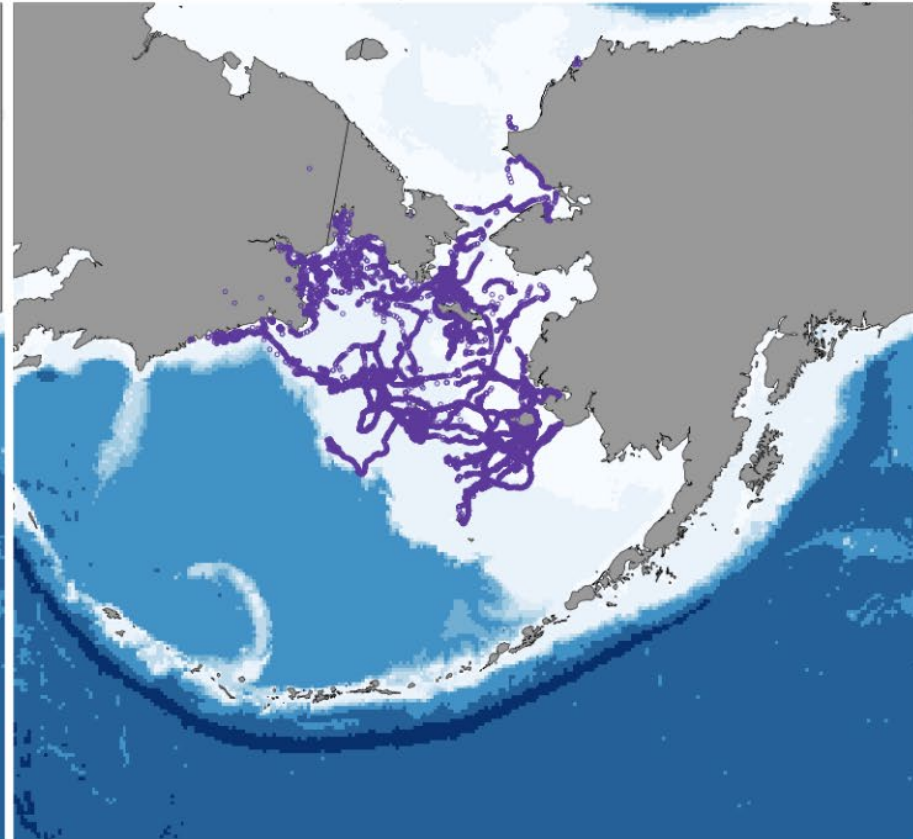
	Ribbon seals	Spotted seals
Splash GPS tag	5	10
SPOT tag	8	5
Total # seals tagged	9	11

# Seal movements

ribbon seal



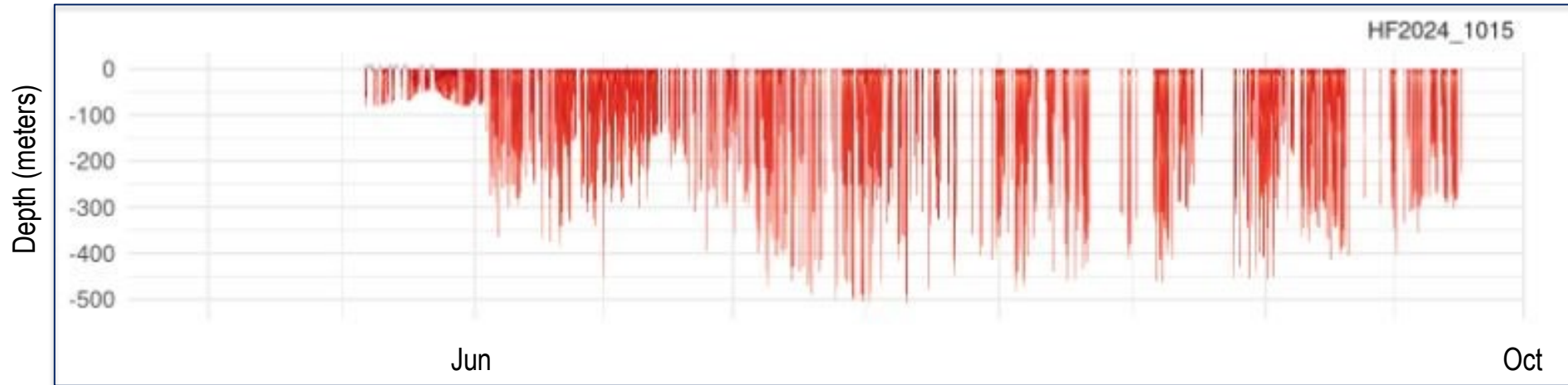
spotted seal



Longitude (decimal degrees)

# Diving behavior

## Ribbon seal

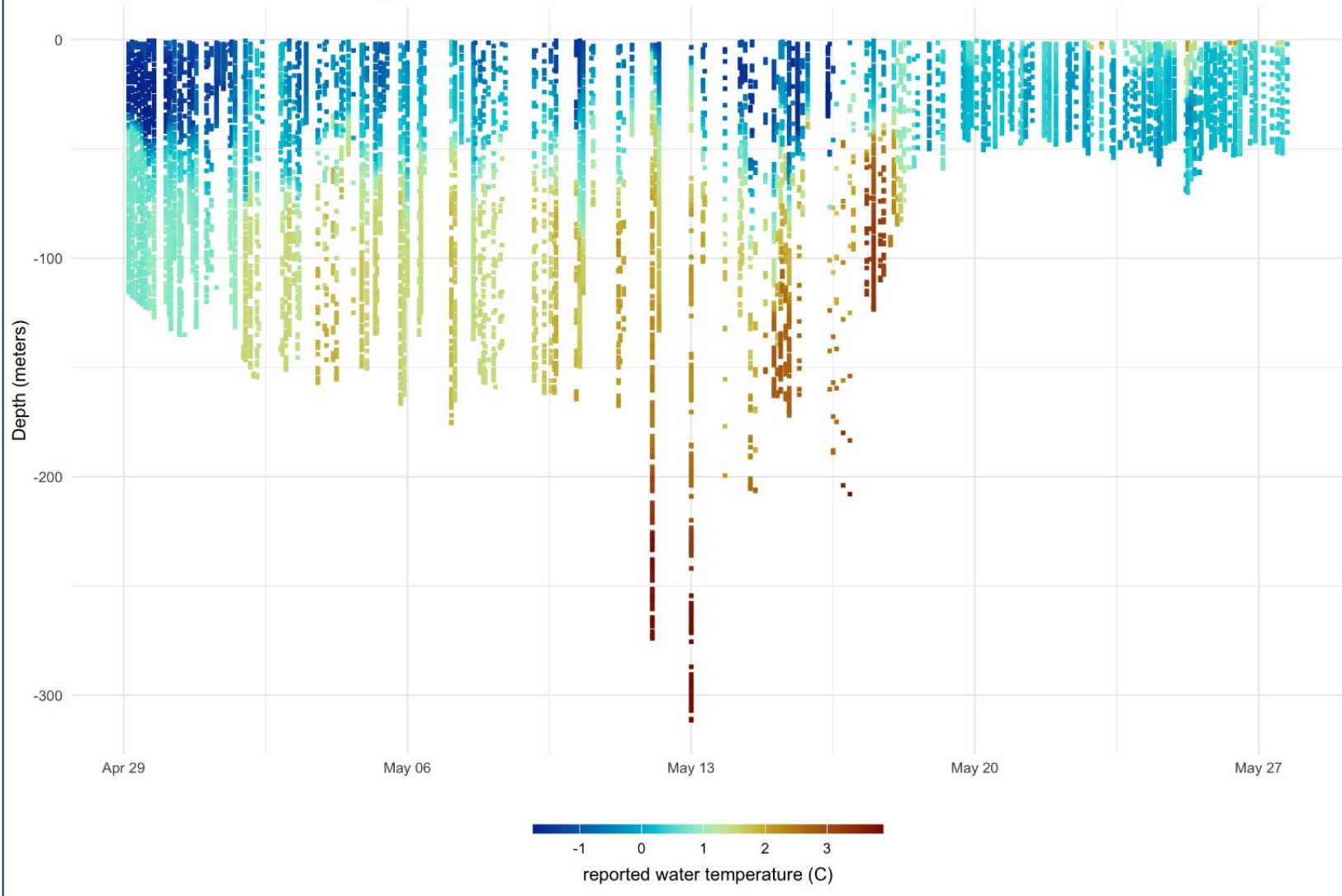


## Spotted seal



# Dive profiles

Measurements of temperature at depth from a bio-logger deployed on a spotted seal in the western Bering Sea  
seal has moved from east to west along shelf break to Russian coast





## Biological samples

Sample types	Intended Analyses
Blood	hematology, serology, stable isotopes, contaminants
Skin snip	genetics
Whisker	stable isotopes
Hair	stable isotopes, contaminants
Nasal swab	pathogens
Rectal swab	pathogens
Scat	harmful algal blooms (HABs), food habits

## Other sampling

Ultrasound measurements of blubber depth	body condition
UAS imagery collection	body condition
Morphometrics	body condition
Seawater collection	eDNA

