

Sitka Black-tailed Deer

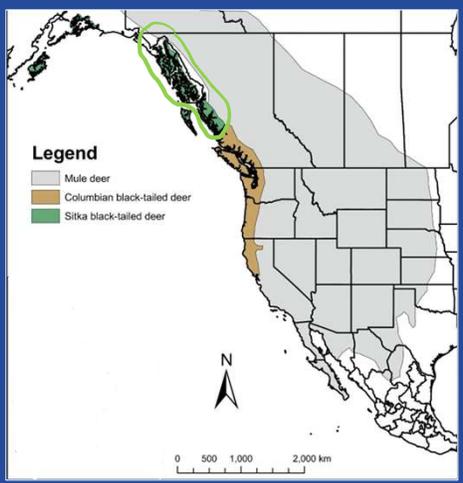


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Photo by R. Woodford



1



Modified from Heffelfinger and Latch 2023



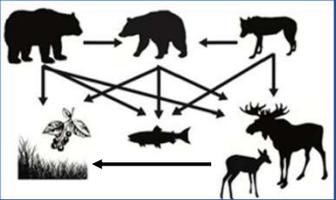
Photos by S. Bethune



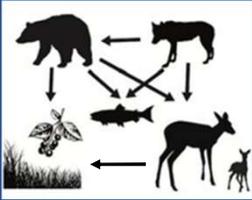
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Important Part of Ecosystem

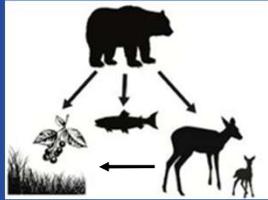
Unit 1A, 1D, 3,5



Unit 2



Unit 4



Modified from Levi et al. 2020



3

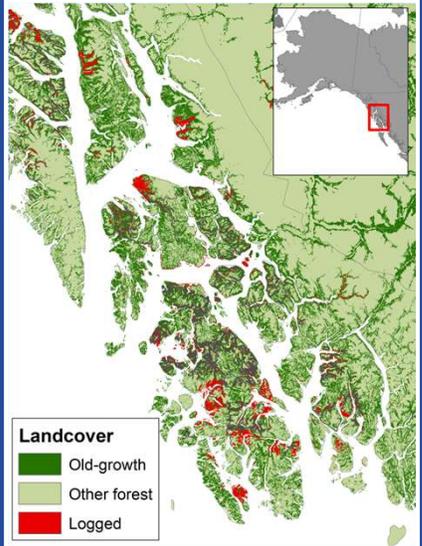
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Ecosystem Change

- Historically rain and wind
- Logging legacy since 1950s across SE
 - Removed large portions of old-growth forests
 - Highest rate on Prince of Wales Island

Landcover

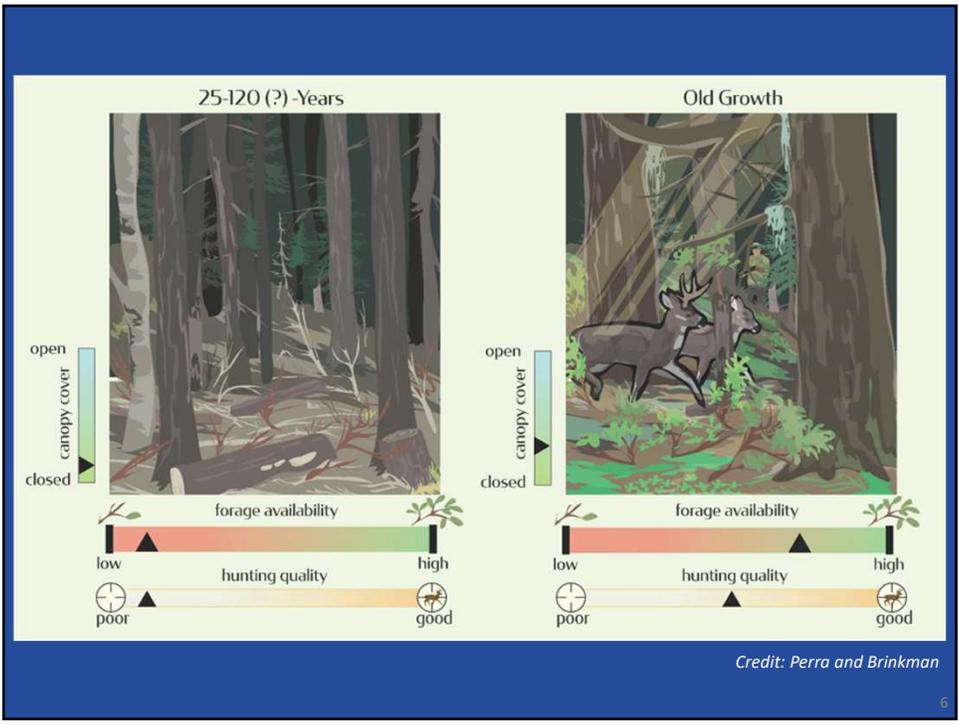
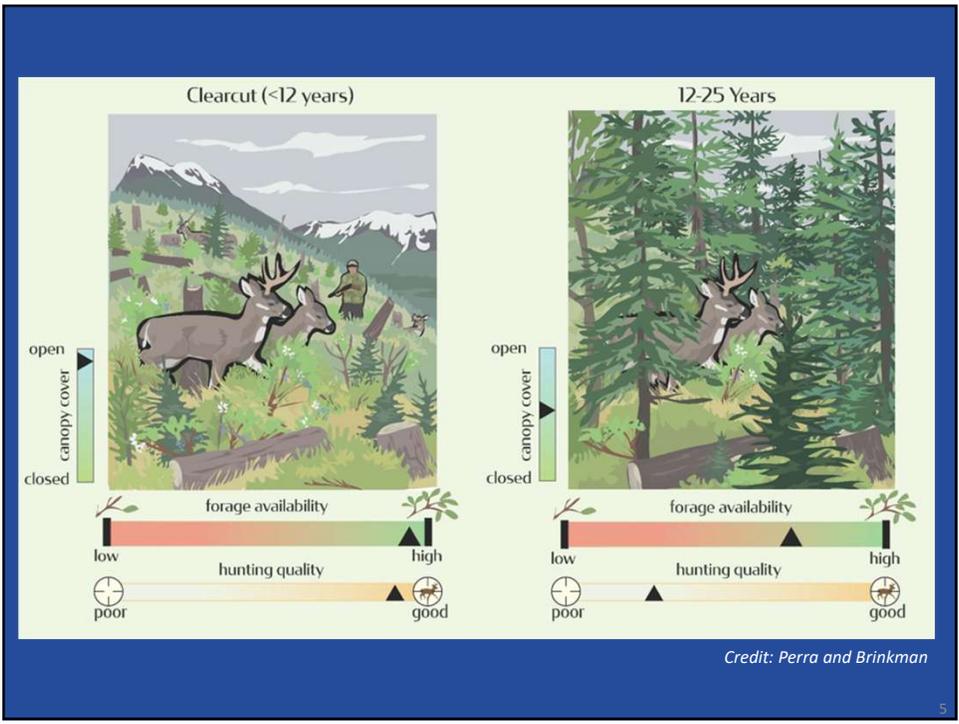
- Old-growth
- Other forest
- Logged

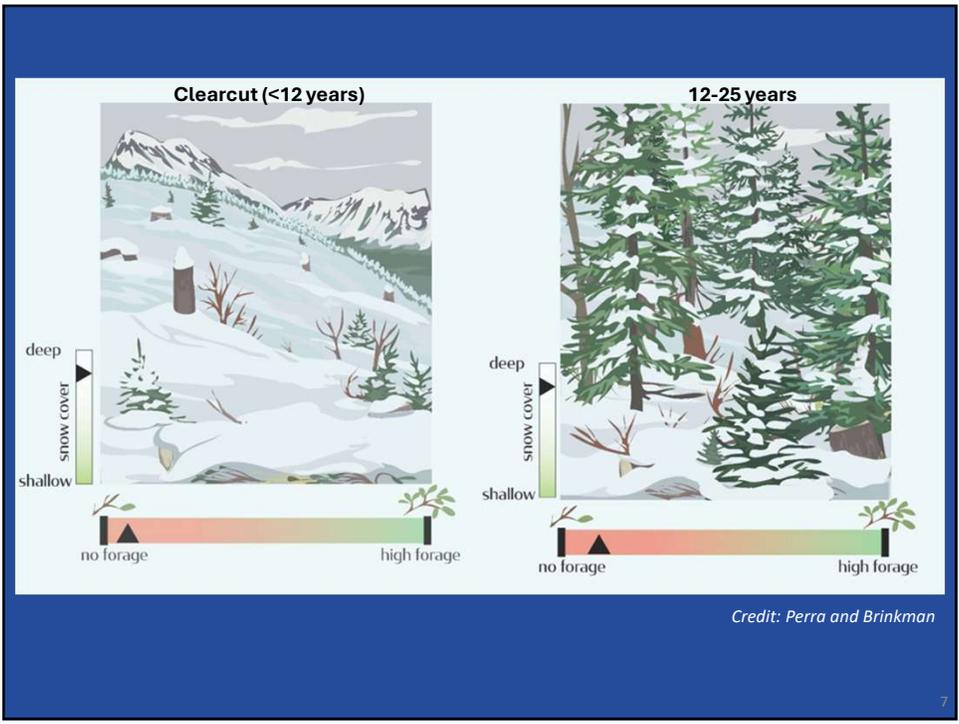




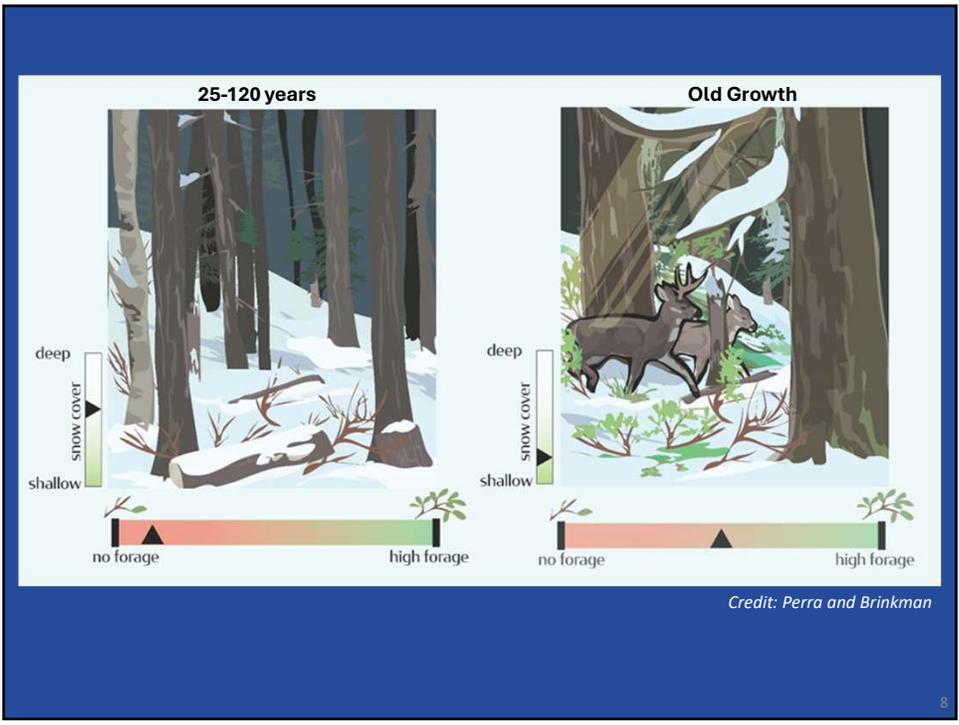
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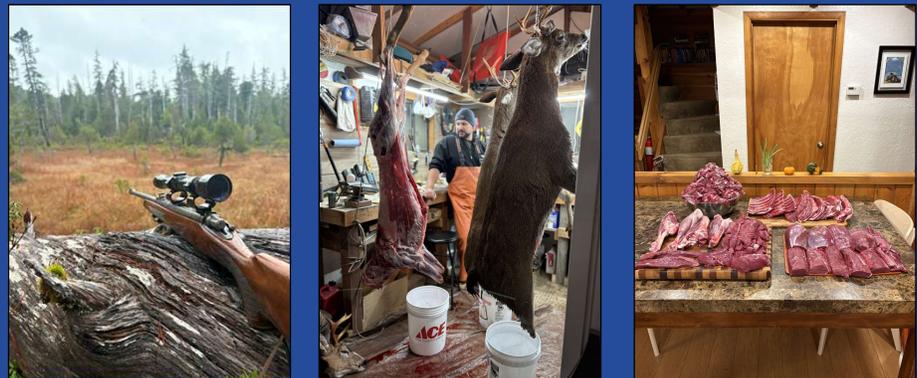




7



8



In Region 1 in 2024:

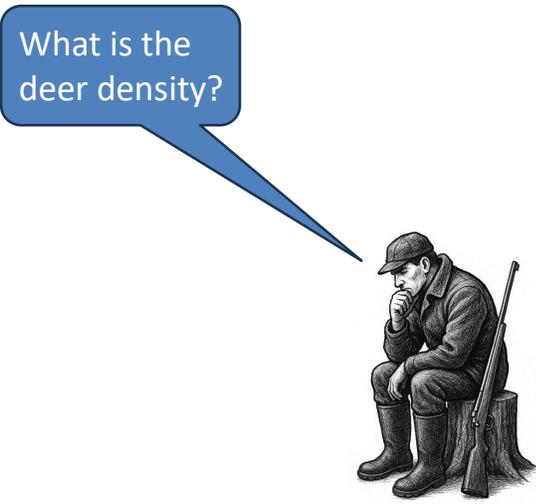
- Southeast residents harvested 7,446 deer
- Non-SE Alaskan residents harvested 610 deer
- Nonresident hunters harvested 460 deer

Photos by T. Hasbrouck



9

9



What is the deer density?



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10



Photo by T. Hasbrouck

11



12

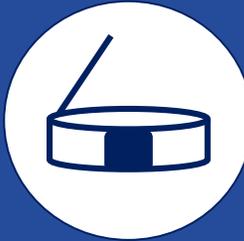


13



14

Tools





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= Integrated Population Model

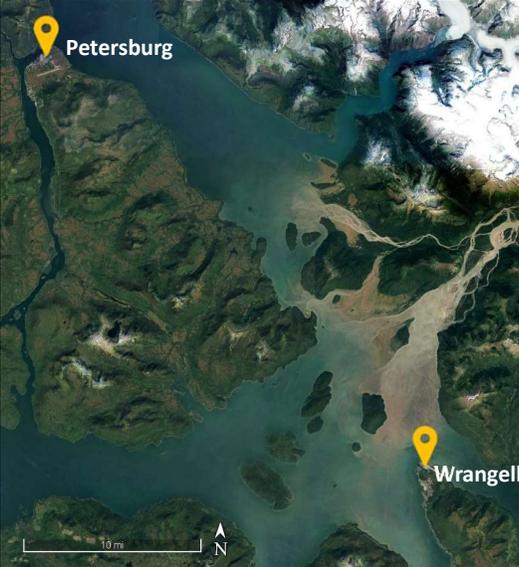


16



16

Mitkof Island



Photos by T. Hasbrouck

17

17



18

18





Fecal DNA

- 15 winter transects
- Repeated 3x/year
- Collected DNA from surface of pellets
- 1,000+ samples



19





Collars

- 49 does, 2 bucks
- Deer carried collars for 2 years
- Collars collected location every 2 hours
- Recorded mortalities

Photos by R. Woodford



20



Cameras

- 88 cameras
- Motion-sense
- Serviced annually
- 400,000 images/yr



Photo by T. Hasbrouck



21

21

What is the deer density?



22

22

What is the deer density?

What are the buck:doe ratios?

What habitat do they use?

Does their habitat change seasonally?

How big is their home range?

How often do does have twins?

When are fawns born?

When is peak rutting activity?

How does snow impact deer?

When do bucks drop their antlers?

When do bucks lose velvet?

What are major causes of mortality?

23

23

Question

How big is their home range?

Method

0 0.5 1 Kilometers

24

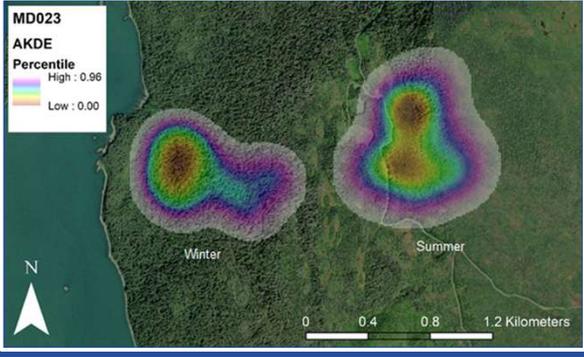
24

Question

Do deer have seasonal movements?



Method


25

25

Question

What habitat do deer select?



Methods





Photos by T. Hasbrouck



26

26

Question

What is the buck: doe ratio?



Methods



27

27

Questions

When are fawns born?

What are twinning rates?



Method



28

28

Questions

When do antlers harden?

When do bucks drop their antlers?



Method





29

29

Question

What are the main causes of mortality?



Method




Photo by D. Eacker

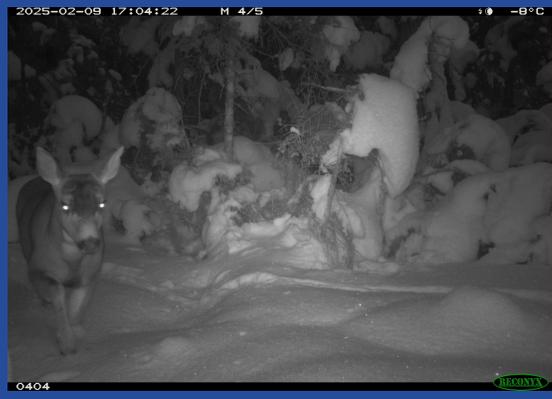


30

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Question

How does snow impact the deer population?



Methods



31



31



32



32

Methods Comparison

- Deer monitoring with cameras
 - Mitkof
 - Gravina
 - Douglas
 - Baranof/Chichagof

33

Acknowledgments

- Dan Eacker, Taurus Wildlife Consulting
- Community of Petersburg
- Frank Robbins and Hilary Wood at the Petersburg office
- University of Idaho, Laboratory for Ecological, Evolutionary and Conservation Genetics
- Field/technical assistance from

Megan Ahern	Roy Churchwell	Lindsey Lorgen-Jones	Alli Tuttle
Nathan Ajax	Anthony Crupi	Sarah Rauchenstein	Jason Waite
Lucas Baranovic	Michelle Duncan	Alex Rodriguez-Smith	Mark Williamson
Seth Bartusek	Jenell Larsen-Tempel	Annette Roug	Riley Woodford
Kimberlee Beckman	Kristian Larson	Yasaman Shakari	Susannah Woodruff
Stephanie Bogle	Alex Lewis	Lars Sorensen	And more...
Todd Brinkman	Matthew Long	Tim Spivey	

34



35