

Unit 19A Black and Brown Bear Predation Control

Black and brown bear lethal removal to enhance moose survival








Management Efforts

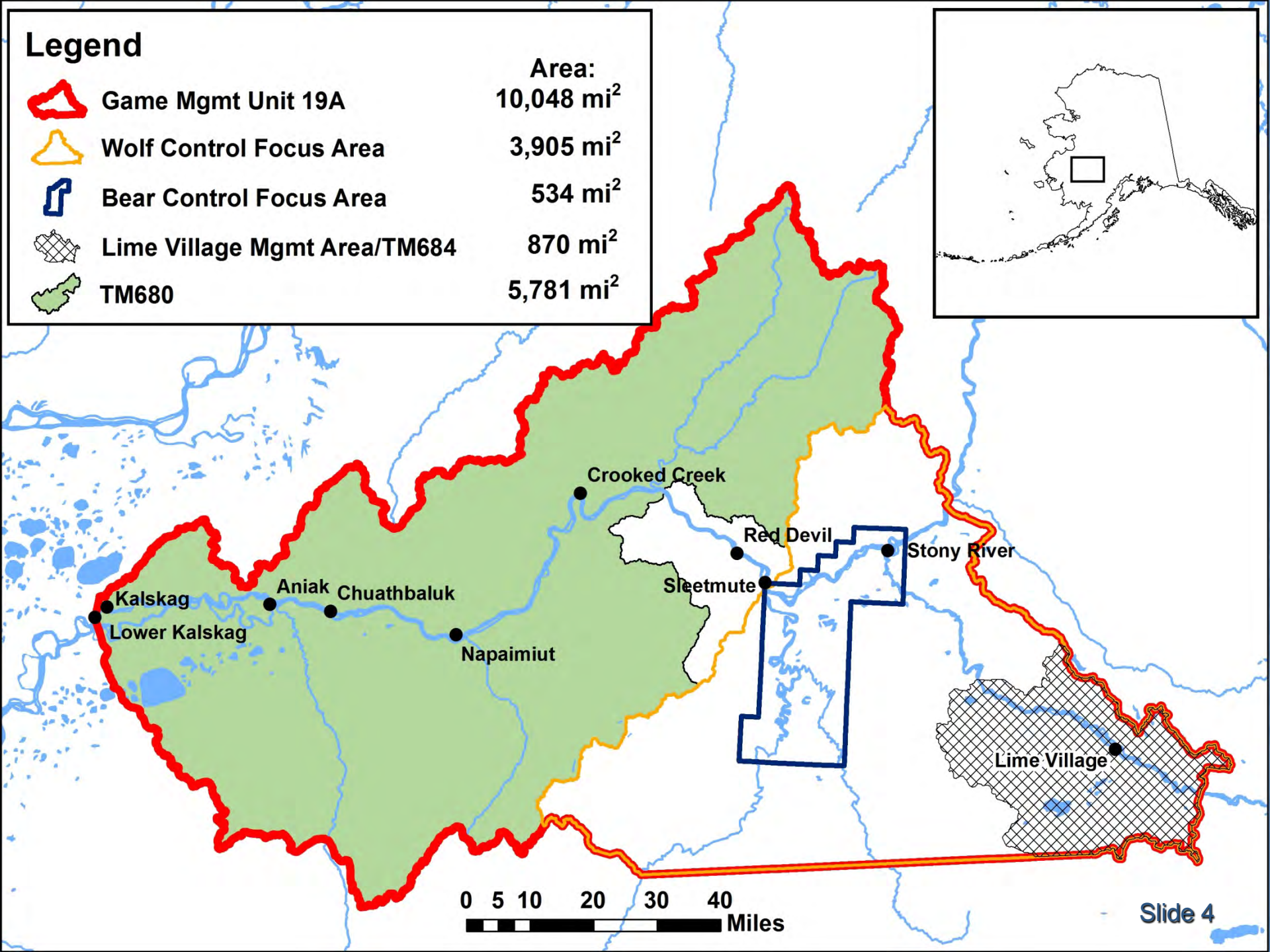
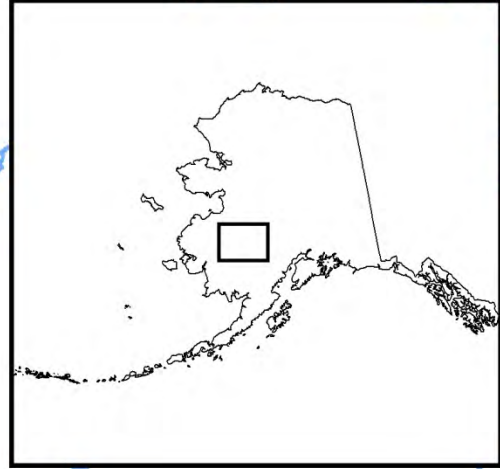
- **Moose seasons reduced/eliminated**
- **Wolf Predation control**
- **Moose surveys inconclusive**
- **Implementation of bear control**
- **Preliminary moose data**

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Legend

-  Game Mgmt Unit 19A Area: 10,048 mi²
-  Wolf Control Focus Area 3,905 mi²
-  Bear Control Focus Area 534 mi²
-  Lime Village Mgmt Area/TM684 870 mi²
-  TM680 5,781 mi²



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Management Efforts

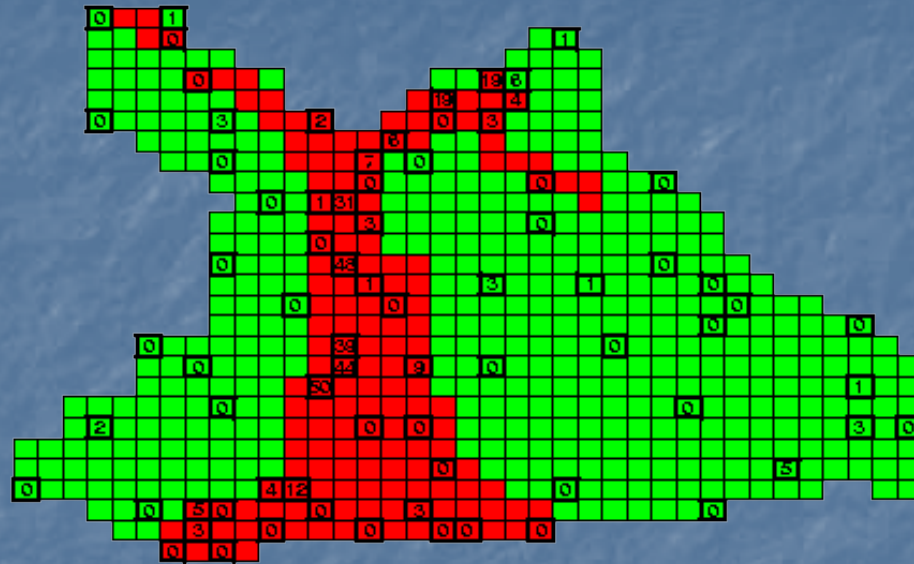
- Moose seasons reduced/eliminated
- **Wolf Predation control**
 - Wolf numbers successfully reduced by more than 60% of precontrol levels

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Moose survey results - density

(3874 mi²)



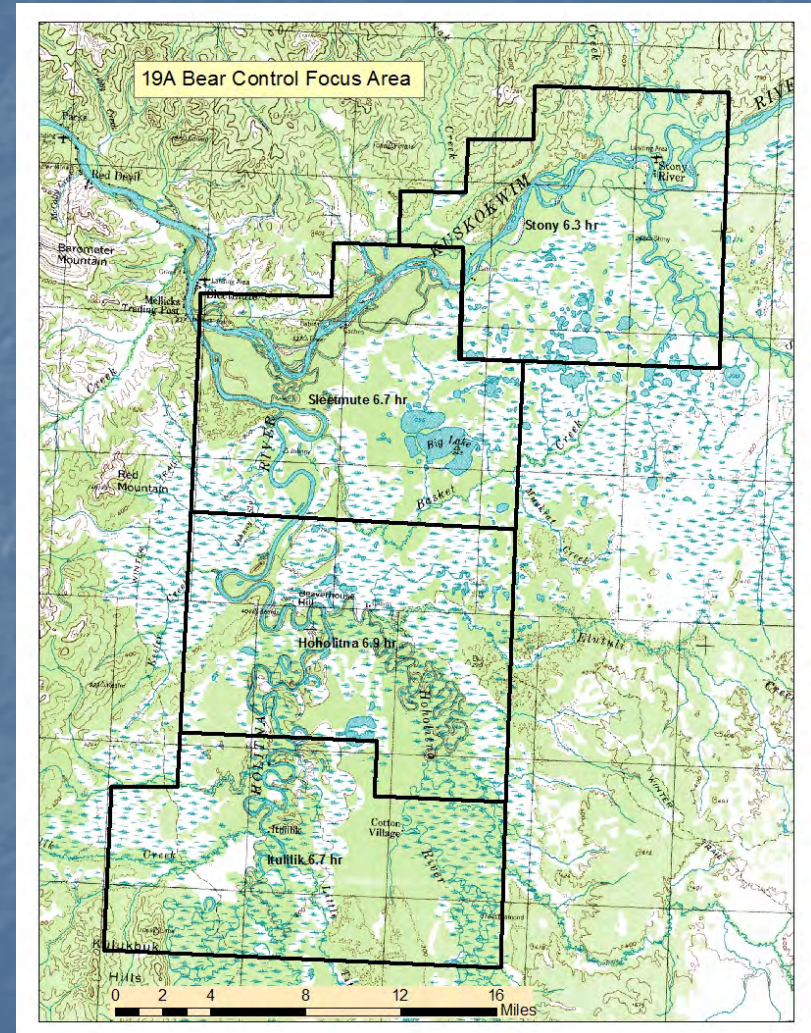
Year	Moose/mi ²	90% CI	Range
2005	0.28	± 17%	897–1270
2008	0.44	± 28%	1225–2181
2011	0.25	± 18%	789–1135
2011 w/scf	0.43	± 36%	1066–2266

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Implementation of bear control

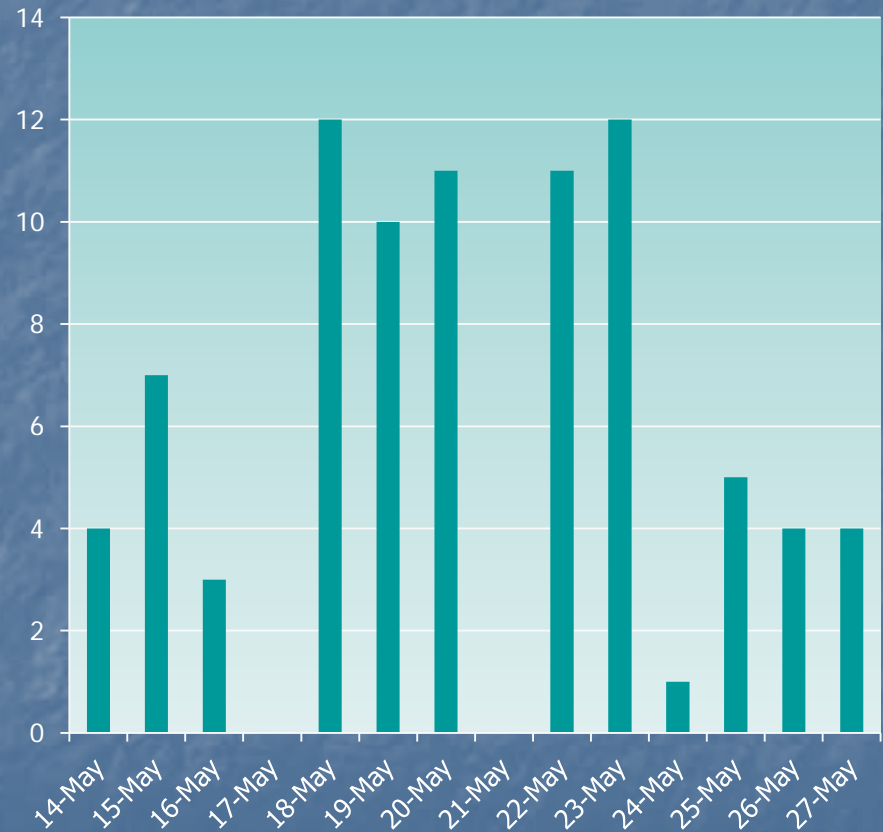
- **Methods**
- Bear estimate
- Lethal removal
- Removal tallies
- Meat distribution
- Costs and impacts



Implementation of bear control

- Methods
- **Bear estimate**
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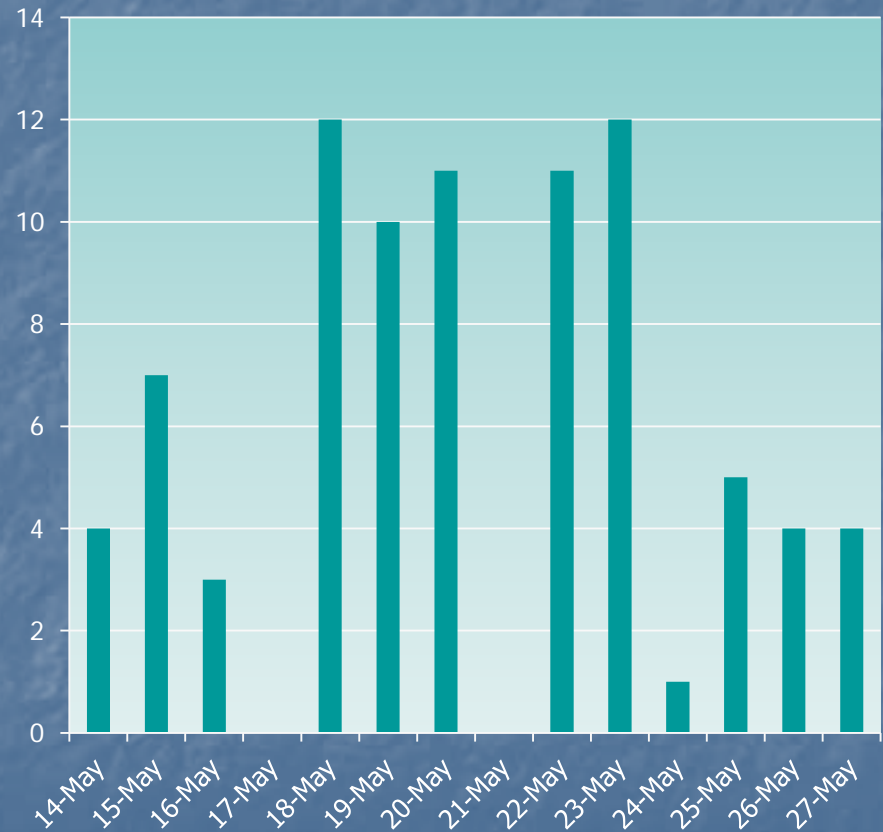
Bears removed



Implementation of bear control

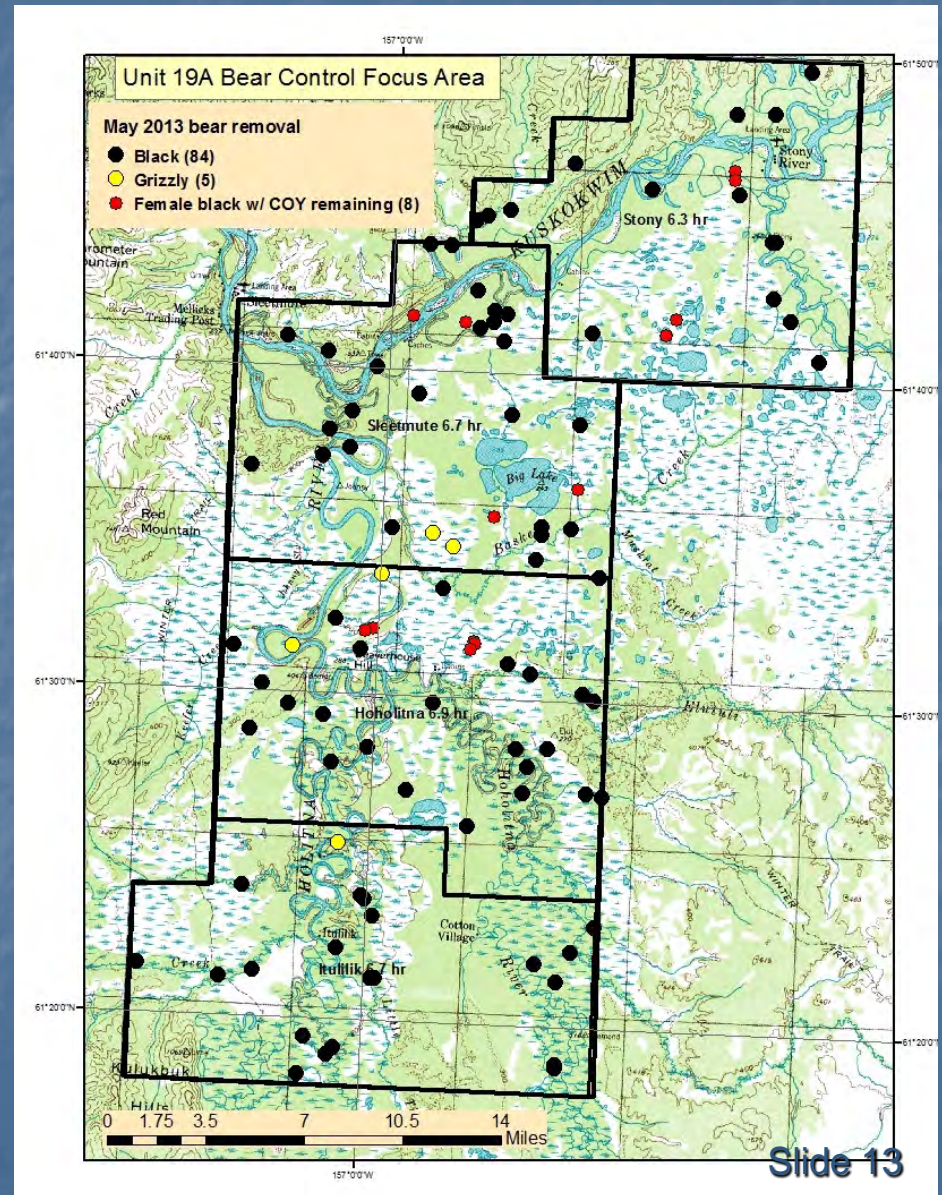
- **Methods**
- **Bear estimate - preliminary**
 - 94 independent bears
 - (SE=1.9; 95% CI = 92 – 102)
 - Relative precision 4% @ 95% CI

Bears removed



Implementation of bear control

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- **Lethal removal**
- Removal tallies
- Meat distribution
- Costs and impacts

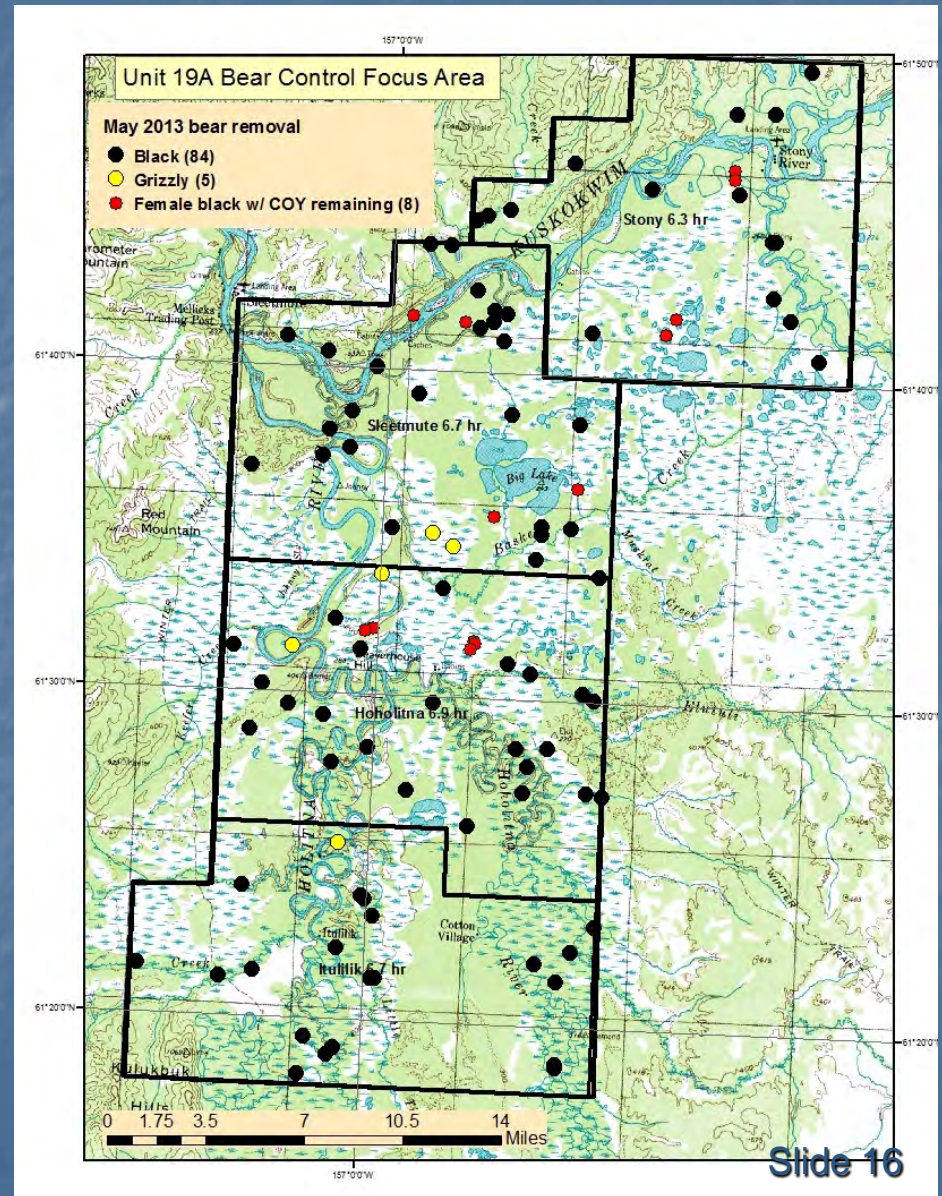


Implementation of bear control

- Methods
 - Bear estimate
 - Lethal removal
 - **Removal tallies**
 - Meat distribution
 - Costs and impacts
- 84 black bears
 - 5 brown bears
 - 8 black bear sows with cubs passed

Implementation of bear control

- Methods
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- Lethal removal
- **Removal tallies**
 - 89% black bear removal
 - (82 – 91%; 95% CI)

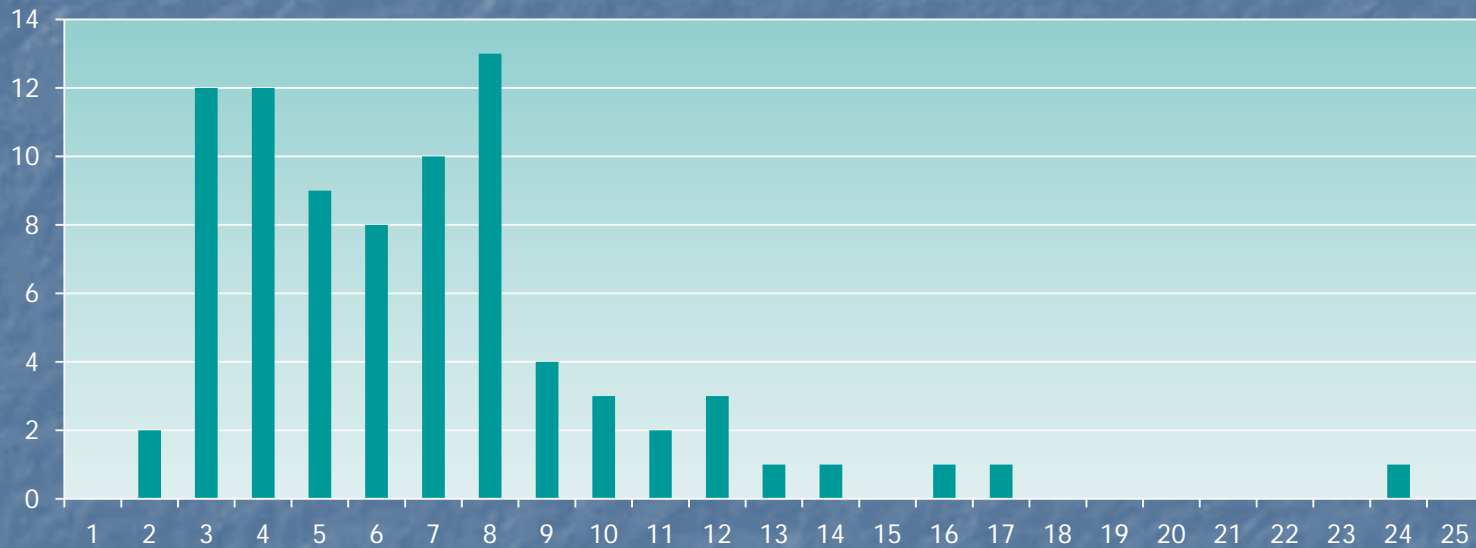


Implementation of bear control

- Methods
- Bear estimate
- Lethal removal
- **Removal tallies**

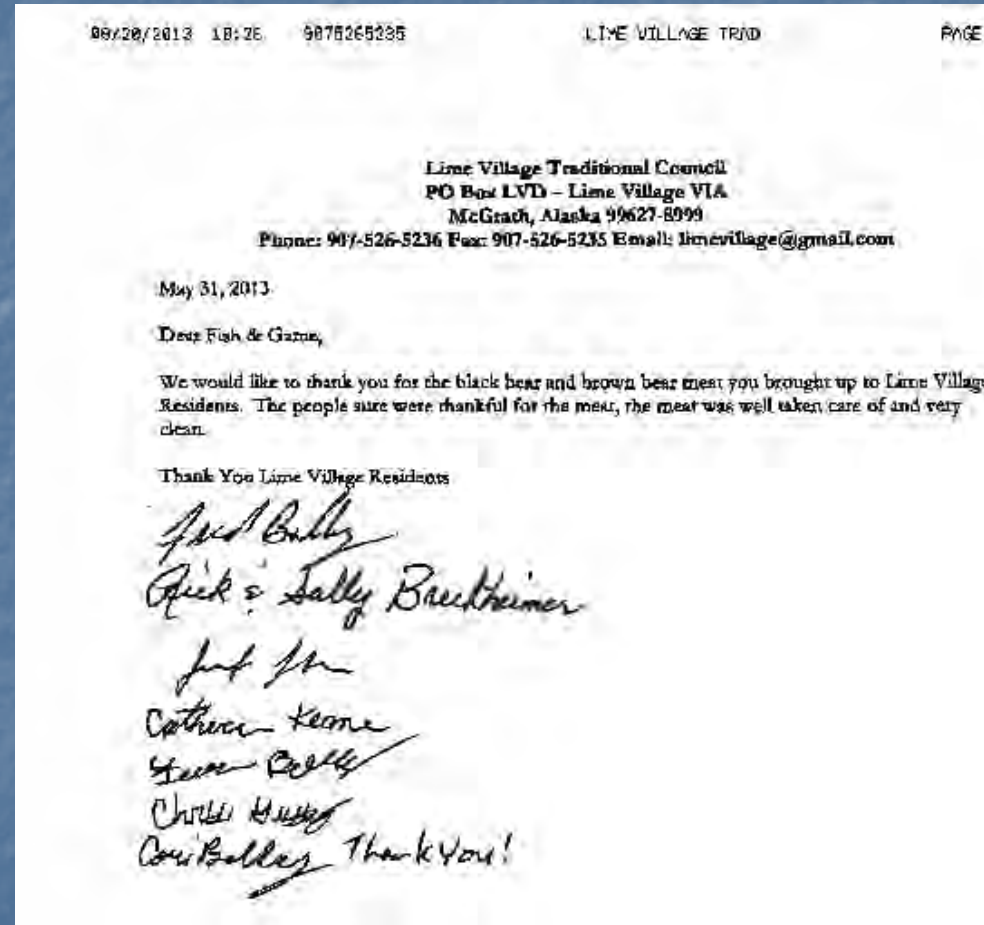
Total	Males	Females	Females w/cubs	% of total w/cubs
99	38	53	8	8%
	62 males:100 females			

Black bear age distribution



Implementation of bear control

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Implementation of bear control

- **Methods**
- **Bear estimate**
- **Lethal removal**
- **Removal tallies**
- **Meat distribution**
- **Costs and impacts**

Implementation of bear control

- Methods
- Bear estimate
- Lethal removal
- Removal tallies
- Meat distribution
- **Costs in dollars and impacts on the region**
- Regional impacts
- Monetary impacts
- Opportunity impacts
- Public impacts

Implementation of bear control

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- Bear estimate
- Lethal removal
- Removal tallies
- Meat distribution
- **Costs in dollars and impacts on the region**
- Regional impacts
- Monetary impacts
- Opportunity impacts
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Preliminary moose data

- **Composition**



Year	Bulls: 100 COWS	Calves: 100 COWS
2005	8	24
2007	35	45
2008	34	27
2009	51	36
2010	48	19
2011	38	31
2013	55	50

Preliminary moose data

-22 cow-calf groups located during spring and fall surveys

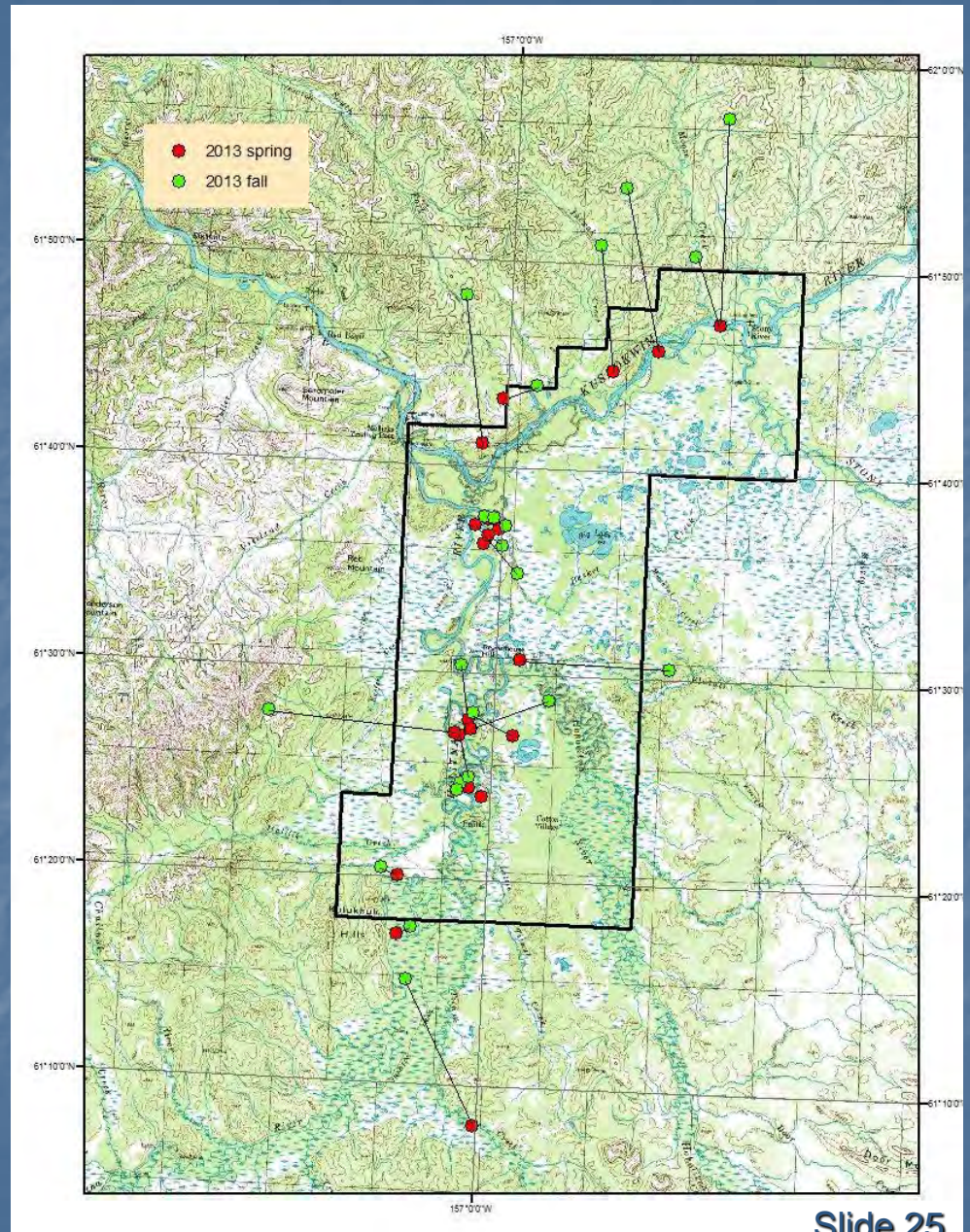
-Overall 18/35 calves
51% survival

-Outside BCFA 6/18 calves
33% survival

-Within BCFA 12/17 calves
71% survival

-50 calves:100 cows

-Survival advantage for those calves with cows that remained within the bear control focus area.



Future plans

- **March 2014**
 - **GSPE moose estimate within the BCFA**
- **May 2014**
 - **Year 2 of bear control**
 - **Twinning data**
 - **Calf survival**

END



Land ownership

