

**From:** [Grizzle, Betty](#)  
**To:** [Guinotte, John](#)  
**Subject:** Re: Wolverine and trapping  
**Date:** Monday, March 27, 2017 4:10:11 PM

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Thanks John. I think the power is still out in Carlsbad office. I will go over this with Ed when I am back in the office.

On Mon, Mar 27, 2017 at 2:57 PM, Guinotte, John <[john\\_guinotte@fws.gov](mailto:john_guinotte@fws.gov)> wrote:

Hi Ed, Here is the Alberta trapping data. I've attached shapefiles I created from attached csv and xls.

Best, John

----- Forwarded message -----

**From:** Shevenell Webb <[Shevenell.Webb@ab-conservation.com](mailto:Shevenell.Webb@ab-conservation.com)>  
**Date:** Fri, Mar 24, 2017 at 6:24 AM  
**Subject:** Re: Wolverine and trapping  
**To:** "Guinotte, John" <[john\\_guinotte@fws.gov](mailto:john_guinotte@fws.gov)>  
**Cc:** Betty Grizzle <[betty\\_grizzle@fws.gov](mailto:betty_grizzle@fws.gov)>

Hi John,

Sorry for the delay. We were supposed to get all of our DNA results back a few weeks ago, but instead of waiting further, I wanted to send you what we have for wolverine locations. I have attached 2 spreadsheets. The wolverine harvest spreadsheet includes all wolverines that were harvested by trappers from 1989-2012 (note that 2012 was an incomplete year because not all registrations had been received at the time of data entry). Trappers are required to bring in their wolverine pelts to be tagged and registered at Fish and Wildlife Offices. The date is when the animal was harvested, sex, and lat/longs are the center point of their trapline (we don't have exact locations). This is the most credible source of harvest because they are brought into Fish and Wildlife and why we used Fur Registration data in Fig 1 in our Snow paper.

The second spreadsheet was created from multiple sources. It includes all the females and lactating females we identified from our run pole study seen in Fig 1 of our Snow paper (2012-2015). It also includes new data not in Fig 1. Sex was determined from DNA test of trapper harvested tissue samples (2012-2015), so each sample is a unique wolverine. Locations from tissue samples are center lat/longs of trapline. We also have been radio collaring wolverines in the Birch Mountains area the last 2 winters and I have included the females we identified there. Note that some individuals have been identified at multiple

sites. The capture locations for radio-collared animals in this spreadsheet are exact.

What sort of analysis are you working on with these data? Let me know if you need further clarification.

best, Shevenell

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Shevenell Webb, Wildlife Biologist

Alberta Conservation Association

phone: 207-242-2875

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**From:** Guinotte, John <[john\\_guinotte@fws.gov](mailto:john_guinotte@fws.gov)>

**Sent:** Monday, February 27, 2017 9:20 AM

**To:** Shevenell Webb

**Cc:** Betty Grizzle

**Subject:** Fwd: Wolverine and trapping

Dear Shevenell,

We are currently involved in a species status assessment for the wolverine in the lower 48 states and are trying to obtain all occurrence records, den sites, and trapline information for Alberta and BC. Would you be able to provide this information from your 2016 paper? And do you know who I should contact to obtain this information for BC? Happy to chat on the phone if you prefer.

Many thanks,  
John

John Guinotte, PhD  
Fish and Wildlife Biologist  
Ecological Services  
U.S. Fish and Wildlife Service  
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[john\\_guinotte@fws.gov](mailto:john_guinotte@fws.gov)

----- Forwarded message -----

From: **Doherty, Kevin** <[kevin\\_doherty@fws.gov](mailto:kevin_doherty@fws.gov)>  
Date: Mon, Feb 27, 2017 at 6:54 AM  
Subject: Fwd: Wolverine and trapping  
To: Stephen Torbit <[stephen\\_torbit@fws.gov](mailto:stephen_torbit@fws.gov)>, "Guinotte, John" <[john\\_guinotte@fws.gov](mailto:john_guinotte@fws.gov)>

see below from Boyce. Two names for trap line. No effort data. Low density pops and little harvest is the short story from his experience.

----- Forwarded message -----

From: **Mark Boyce** <[boyce@ualberta.ca](mailto:boyce@ualberta.ca)>  
Date: Sun, Feb 26, 2017 at 10:44 PM  
Subject: Re: Wolverine and trapping  
To: "Doherty, Kevin" <[kevin\\_doherty@fws.gov](mailto:kevin_doherty@fws.gov)>

Hi Kevin:

On Crown land (govt land in mtns) all trapping is restricted to registered traplines in Alberta. Although there has been an attempt to compile effort data, e.g., trap nights, it has not happened yet. On average about 50% of traplines are actively trapped in any particular year. Harvests of wolverines are rare in southern Alberta and BC. We know that they can move quite a long distance, especially young males, so there will be no surprise when wolverines are captured in southern Alberta and BC, but generally the densities are very low. I have a trapline at Nordegg and I had a wolverine ravaging my marten sets last year (2015). But it did not stick around and I never had an opportunity to trap him/her. We have a quota of 1 wolverine per trapline per year but I've never caught one.

Shevenell has compiled all wolverine harvest records from registered trapline fur reports, and I believe that these data would be the best available for Alberta. Similar records exist for BC.

I'm not sure that I told you anything new--we do not have records on trapping effort. And I doubt that trappers in southern areas are likely to be making many sets for wolverines.

Most would be caught in wolf or lynx sets.

Cheers,

Mark

On Tue, Feb 21, 2017 at 1:04 PM, Doherty, Kevin <[kevin\\_doherty@fws.gov](mailto:kevin_doherty@fws.gov)> wrote:

Mark,

Some folks in the USFWS asked if I would reach out to you about your opinion on a potential Canada and United States boundary effect for Wolverine. Specifically, there is a desire to understand if there is any data on trapping effort and harvest totals for wolverines in southern B.C. and Alberta. From your Alberta Wolverine paper in JWM it appeared that wolverine trapping was low in the trapping record from Southern Alberta. So a couple questions:

Is there an information base that would include trapping effort and trapping success for wolverines that could be used to understand the potential effects of movement on Wolverine between the US and Canada?

If there is data, who would we need to contact to discuss getting access to the data?

Please let me know if you would like to discuss via the phone.

Cheers

Kevin

p.s. We have met a long time ago at the wildlife society meetings in Calgary, when I was a brand new Ph.D. student. When I was googling your information I saw that we were co-authors in Google Scholar, but could not figure out what the paper was. It looked this morning at my pubs, and it was Krissy Bush's Sage-grouse Genetics work.

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Kevin Doherty, PhD  
Spatial Ecologist

USFWS Region 6 --Science Applications  
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