

**From:** [Turner, Ed](#)  
**To:** [Betty Grizzle](#)  
**Subject:** Fwd: Wolverine Data  
**Date:** Monday, January 9, 2017 3:54:09 PM  
**Attachments:** [wolverine\\_working\\_glacier\\_kernel.jpg](#)  
[wolverine\\_working\\_glacier\\_kernel\\_inman.jpg](#)

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Betty, More from John. He ran some density kernels and has a few images.

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

From: **Guinotte, John** <[john\\_guinotte@fws.gov](mailto:john_guinotte@fws.gov)>  
Date: Mon, Jan 9, 2017 at 1:35 PM  
Subject: Fwd: Wolverine Data  
To: "Turner, Ed" <[ed\\_turner@fws.gov](mailto:ed_turner@fws.gov)>

John Guinotte  
Fish and Wildlife Biologist  
Ecological Services  
U.S. Fish and Wildlife Service  
Mountain Prairie Region 6  
134 Union Blvd., Lakewood, CO 80228  
303-236-4264  
[john\\_guinotte@fws.gov](mailto:john_guinotte@fws.gov)

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

From: **Guinotte, John** <[john\\_guinotte@fws.gov](mailto:john_guinotte@fws.gov)>  
Date: Mon, Jan 9, 2017 at 2:29 PM  
Subject: Fwd: Wolverine Data  
To: "Turner, Ed" <[ed\\_turner@fws.gov](mailto:ed_turner@fws.gov)>

Hi Ed,  
Here is another quick analysis I did w the MT NH data and Inmans areas. On the mend, but slow going.  
Best, John

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

From: **Guinotte, John** <[john\\_guinotte@fws.gov](mailto:john_guinotte@fws.gov)>  
Date: Thu, Jul 7, 2016 at 3:18 PM  
Subject: Re: Wolverine Data  
To: "Bush, Jodi" <[jodi\\_bush@fws.gov](mailto:jodi_bush@fws.gov)>, Stephen Torbit <[Stephen\\_Torbit@fws.gov](mailto:Stephen_Torbit@fws.gov)>

Hi Jodi and Steve,

I pulled in the data Jodi passed along from MT Nat Heritage on wolverine observations. Attached are a couple of maps showing the observations and a quick kernel density plot, aka "heat map" I worked up. The observations span 1894-2016 and include various types of observations including: tracks, skulls, traps, visual observations, trail cams, etc. Here is an explanation of kernel density <http://pro.arcgis.com/en/pro-app/tool-reference/spatial-analyst/kernel-density.htm>

Also, I'm going to be out of the office tomorrow July 8 - July 15 at NCTC training, but I will have my computer with me and will be checking email periodically.

Best, John

John Guinotte  
Fish and Wildlife Biologist  
Ecological Services  
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On Wed, Jul 6, 2016 at 3:36 PM, Bush, Jodi <[jodi\\_bush@fws.gov](mailto:jodi_bush@fws.gov)> wrote:  
Here you go John. JB

Jodi L. Bush  
Office Supervisor  
Montana State Ecological Services Office  
585 Shepard Way, Suite 1  
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(406) 449-5225, ext.205

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

From: **Miller, Martin** <[martinm@mt.gov](mailto:martinm@mt.gov)>  
Date: Wed, Jul 6, 2016 at 3:35 PM  
Subject: RE: Wolverine Data  
To: "[jodi\\_bush@fws.gov](mailto:jodi_bush@fws.gov)" <[jodi\\_bush@fws.gov](mailto:jodi_bush@fws.gov)>  
Cc: "Maxell, Bryce" <[BMaxell@mt.gov](mailto:BMaxell@mt.gov)>

Jodi,

The attached zip file contains a personal geodatabase with layers for wolverine occurrences, observations, and a range map. Also included are metadata and a file with agency contacts that may provide additional information.

In order to help us improve our services to you, we invite you to take a simple survey. The survey is intended to gather some basic information on the value and quality of the information and services you recently received from the Montana Natural Heritage Program. The survey is short and should not take more than a few minutes to complete. All information will be kept confidential and will be used internally to improve the delivery of services and to help document the value of our services. Use this link to go to the survey: <http://www.surveymonkey.com/s/RYN8Y8L>.

Let me know if you have any questions.

Thanks,

Martin Miller

Data Assistant

Montana Natural Heritage Program (<http://mtnhp.org>)

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(406) 444-3290

(406) 444-0266 (fax)

[martinm@mt.gov](mailto:martinm@mt.gov)

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**From:** Maxell, Bryce  
**Sent:** Wednesday, July 06, 2016 3:02 PM  
**To:** Miller, Martin <[martinm@mt.gov](mailto:martinm@mt.gov)>  
**Subject:** FW: Wolverine Data

Hi Martin,

Could you please put together shapefiles of the following for Wolverine:

Observations

Species Occurrences

Range Map

If it can all be zipped small enough to attach to an email, please just go ahead and email it to Jodi and cc me. Otherwise, please email the ftp site address.

Let me know if you have any questions.

-Bryce

Bryce A. Maxell

Program Coordinator

Montana Natural Heritage Program <http://mtnhp.org>

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[bmaxell@mt.gov](mailto:bmaxell@mt.gov)

**From:** Bush, Jodi [[mailto:jodi\\_bush@fws.gov](mailto:jodi_bush@fws.gov)]  
**Sent:** Wednesday, July 06, 2016 2:59 PM  
**To:** Maxell, Bryce <[BMaxell@mt.gov](mailto:BMaxell@mt.gov)>  
**Subject:** Re: Wolverine Data

yes Bryce. You are welcome.

Can I get the information as shapefile? Appreciate it. JB

Jodi L. Bush

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On Wed, Jul 6, 2016 at 2:42 PM, Maxell, Bryce <[BMaxell@mt.gov](mailto:BMaxell@mt.gov)> wrote:

Hi Jodi,

Attached is what we have for Wolverine records in Montana (associated map of observations in upper map below). The cross-hatched areas in the bottom map are our species occurrences that go out in environmental reviews.

Let me know if you want any of this as a shapefile or geodatabase or if you want to chat anything out via phone.

Thank you very much for the \$5,000 addition to the IPAC agreement. That helps us keep our data up-to-date and comprehensive!

-Bryce



cid:image001.png@01D1D79A.9EC34DB0



cid:image002.png@01D1D79A.9EC34DB0



Bryce A. Maxell

Program Coordinator

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Edwin Turner, Geographer  
GIS Mapping and Analysis Branch

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