

From: [Shoemaker, Justin](#)
To: [Guinotte, John](#)
Subject: Fwd: maps for Monday
Date: Monday, March 6, 2017 10:36:29 AM
Attachments: [Wolverine D Inman Habitat Obs2.pdf](#)
[Wolverine Inman Habs Obs.pdf](#)

Justin Shoemaker
Acting Branch Chief for Classification and Recovery
U.S. Fish and Wildlife Service, Region 6
Phone: 303-236-4217
Email: justin_shoemaker@fws.gov

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

From: **Grizzle, Betty** <betty_grizzle@fws.gov>
Date: Mon, Mar 6, 2017 at 8:40 AM
Subject: Fwd: maps for Monday
To: "Shoemaker, Justin" <justin_shoemaker@fws.gov>

Hi Justin - Can you take a quick look at these two maps? These represent the historic range of wolverine in western U.S. I'm not sure if either of them are ready to send to the Core Team; would like your input as to which makes more sense to you. I would like to send only one. John is creating the current range map and I asked him to try and complete that before the call tomorrow.

Thanks,
Betty

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

From: **Turner, Ed** <ed_turner@fws.gov>
Date: Thu, Mar 2, 2017 at 2:30 PM
Subject: maps for Monday
To: Betty Grizzle <betty_grizzle@fws.gov>

Here are two maps and we can build from these.

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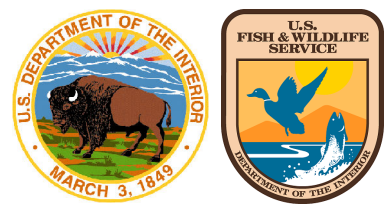
Edwin Turner, Geographer
GIS Mapping and Analysis Branch

DOI-R8-CFWO
USFWS Carlsbad Fish and Wildlife Office
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Carlsbad, CA 92008
760.431.9440 x266

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Betty J. Grizzle, D.Env.
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Wolverine Observations and Inman Modeled Habitats

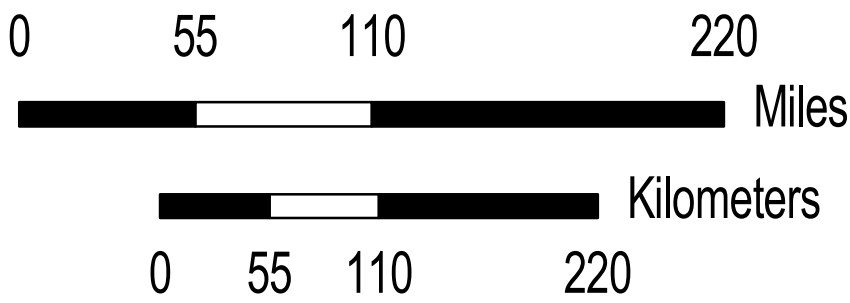
This map represents areas of western United States predicted to be primary wolverine habitat (suitable for survival, i.e., use by resident adults), female dispersal habitat (suitable for relatively brief female dispersal movements), and male dispersal habitat (suitable for relatively brief male dispersal movements) based on resource selection function modeling developed with wolverine telemetry locations from the Greater Yellowstone Ecosystem, of Montana, Idaho, and Wyoming, USA, 2001-2010.

DRAFT Not for real use yet....

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CARLSBAD FIELD OFFICE
GIS CONTACT: ED TURNER
BIOLOGY CONTACT: BETTY GRIZZLE
(760) 431-9440
DATA SOURCE: USFWS, INMAN (WCS), COPELAND
IMAGE SOURCE: ESRI Online Mapper
Mar 02, 2017
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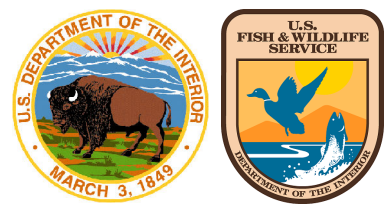
▲ Wolverine Observations
Compiled by USFWS-CFWO in the 2017 effort.

Primary Habitat

Female Dispersal

Male Dispersal

Map is a reproduction of Figure 4., from Robert Inman's
Doctoral Thesis No. 2013:4,
Wolverine Ecology and Conservation in
the Western United States

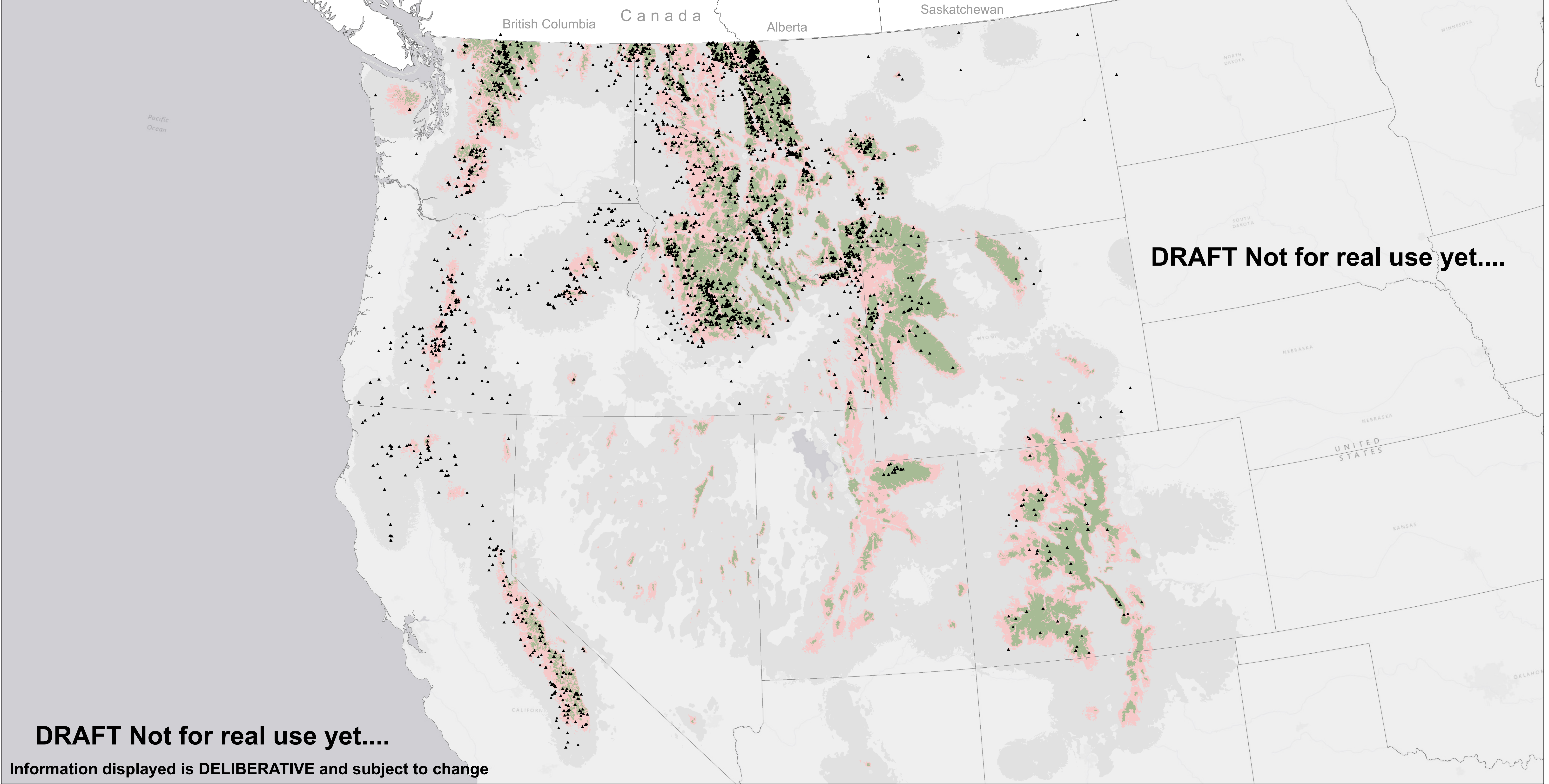


U.S. Fish & Wildlife Service

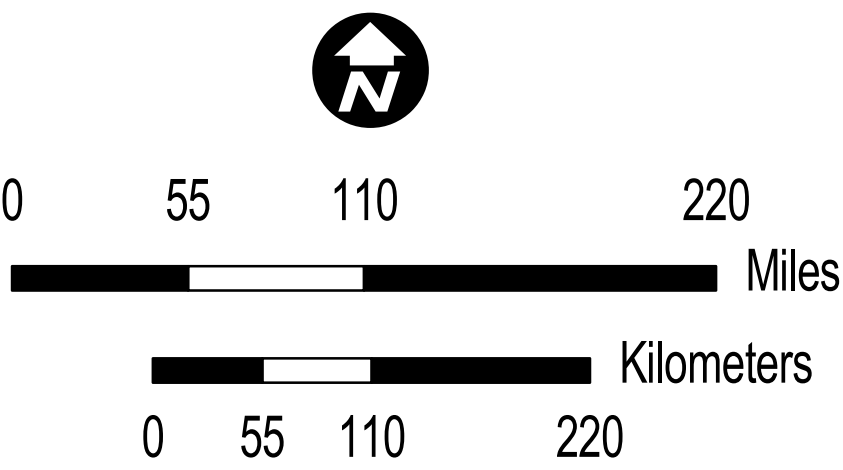
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2177 Salk Ave. Suite 250, Carlsbad, California 92008

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Wolverine Observations and Inman Modeled Habitats

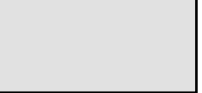


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IMAGE SOURCE: ESRI Online Mapper
Mar 02, 2017
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▲ Wolverine Observations
Compiled by USFWS-CFWO in the 2017 effort.

	Primary Habitat		Female Dispersal
			Male Dispersal