

STATE OF WASHINGTON

September 2017

Periodic Status Review for the Fisher



Jeffrey C. Lewis
*Washington Department of
FISH AND WILDLIFE
Wildlife Program*

The Washington Department of Fish and Wildlife maintains a list of endangered, threatened, and sensitive species (Washington Administrative Codes 220-610-010 and 220-200-100). In 1990, the Washington Wildlife Commission adopted listing procedures developed by a group of citizens, interest groups, and state and federal agencies (Washington Administrative Code 220-610-110). These procedures include how species listings will be initiated, criteria for listing and delisting, a requirement for public review, the development of recovery or management plans, and the periodic review of listed species.

The Washington Department of Fish and Wildlife is directed to conduct reviews of each endangered, threatened, or sensitive wildlife species at least every five years after the date of its listing by the Washington Fish and Wildlife Commission. These periodic reviews include an update on the species status to determine whether the species warrants its current listing or deserves reclassification. The agency notifies the general public and specific parties interested in the periodic status review, at least one year prior to the end of the five-year period, so that they may submit new scientific data to be included in the review. The agency notifies the public of its recommendation at least 30 days prior to presenting the findings to the Fish and Wildlife Commission. In addition, if the agency determines that new information suggests that the classification of a species be changed from its present state, the Department prepares documents to determine the environmental consequences of adopting the recommendations pursuant to requirements of the State Environmental Policy Act.

This document is the final Periodic Status Review for the Fisher. It contains a review of information pertaining to the status of Fishers in Washington. The draft was reviewed by species experts and was available for a 90-day public comment period from May 19 to August 17, 2017. All comments received were considered during the preparation of the final periodic status review. The Department intends to present the results of this periodic status review to the Fish and Wildlife Commission for action at a meeting on September 8, 2017.

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On the cover: inset photo of fisher released in December 2016 in Mt. Rainier National Park by P. Bannick; forest background photo by D. W. Stinson.



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Prepared by
Jeffrey C. Lewis

Washington Department of Fish and Wildlife
Wildlife Program
600 Capitol Way North
Olympia, WA 98501-1091

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EXECUTIVE SUMMARY

The fisher is a mid-sized member of the weasel family that once occurred in the coniferous forests of Washington. The species was extirpated from the state, mainly as a result of over-trapping, in the late 1800s and early 1900s. Extensive carnivore surveys conducted throughout much of the fisher's historical range in the 1990s failed to detect the species, and the fisher was listed as endangered in Washington in 1998. Reintroductions have been successful at reestablishing fisher populations throughout much of the southern portion of their North American range, and because of this success, fisher reintroductions to the Olympic Peninsula and the Cascade Range were a prominent components of the fisher recovery plan for Washington.

The first fisher reintroduction in Washington occurred from 2008 to 2010, and included the translocation of 90 fishers (50F, 40 M) from central British Columbia to Olympic National Park. While this reintroduction has not yet been declared a success, fishers are widely distributed on the Olympic Peninsula and numerous descendants from founders have been detected. The second reintroduction is currently underway in the southern portion of the Cascade Range in Washington. Sixty-nine fishers (38F, 31M) were translocated from central British Columbia from December 2015 to March 2017 and released in the Gifford Pinchot National Forest and in Mount Rainier National Park. This reintroduction is expected to be completed by the fall of 2018.

Reintroductions have been implemented in Washington because there appears to be sufficient habitat to support reintroduced populations. Federal, state, tribal, and private lands provide habitat for fishers in Washington and these forests are managed under a variety of approaches that can support fisher populations. Management of forested habitats that support fishers is guided by a number of planning efforts that include the Northwest Forest Plan (federal lands), numerous habitat conservation plans (for non-federal lands), State Forest Practice rules (for private lands), and the Candidate Conservation Agreement with Assurances for fishers in Washington (for non-federal landowners). These management plans are expected to provide substantial support for fisher recovery in Washington.

Despite proactive efforts in Washington to reestablish fisher populations and to manage forested habitats to support fisher populations, the criteria to down-list the fisher from endangered to threatened status have not yet been met. Until those criteria are met, we recommend that the fisher remain listed as an endangered species in Washington state.

DESCRIPTION & LEGAL STATUS

The fisher (*Pekania pennanti*; Figure 1) is one of the larger terrestrial members of the weasel family (Mustelidae), which also includes martens, mink, otters, badgers, wolverines, skunks and weasels. Female fishers typically weigh 2-3 kg and are 85-95 cm in total length, whereas males are considerably larger than females and typically weigh 3.5-5.5 kg and are 100-115 cm in total length. The fisher is not a well-known species in part because it was extirpated from much of the southern part of its range in the northern United States and southern Canada by the mid-1900s (Lewis et al. 2012). They are commonly confused with more common species such as the Pacific and American martens (*Martes caurina* and *M. americana*) and American mink (*Vison vison*), which are smaller but are similar in body shape and color.



Figure 1. Female fisher (*Pekania pennanti*) in winter pelage.

Fishers are a relatively large member of the weasel family and they have the long, thin build of a weasel. They have a dark brown pelage on their lower back, legs and tail, and a lighter grizzled pelage on the face, head and shoulders that is more pronounced in the winter. Other characteristics of the fisher include a long tail, rounded ears, large feet, and many have a white to amber-colored blaze on their chest and/or abdomen.

Fishers were trapped for their fur in Washington until 1933, when fisher trapping was prohibited to protect the remaining population (Lewis and Stinson 1998). Despite this protection from trapping, Washington's fisher population did not recover. The status review of fisher in Washington (Lewis and Stinson 1998) concluded that the fisher had been extirpated from the state, and the Washington Fish and Wildlife Commission listed it as an endangered species in 1998. The west coast population of fishers has been petitioned for federal listing under the Endangered Species Act on three occasions (1990, 1994, 2000; USFWS 2017). The petition submitted in 2000 resulted in a 2004 warranted-but-precluded finding and a 2014 proposed rule to list the west coast Distinct Population Segment (DPS; USFWS 2014); however, in 2016, the USFWS withdrew the proposed rule on the basis that listing the west coast DPS of the fisher was not warranted (USFWS 2016). A group of organizations brought a lawsuit against the USFWS in response to the USFWS's withdrawal of the proposed rule (Center for Biological Diversity 2016).

DISTRIBUTION

North America. The fisher occurs only in North America. The historical range of the fisher included the boreal and temperate forests from northern Canada to the northern tier of the United States, and four peninsular areas that extended the range southward in the Pacific States, the Northern Rockies, and the Great Lakes and Appalachian regions (Lewis et al. 2012; Figure 2). The southern portion of the fisher's historical range was greatly reduced by unregulated trapping, loss and fragmentation of low and mid-elevation forest habitats, mortality via predator control campaigns, and incidental capture in traps set for other species (Lewis and Zielinski 1996, Powell 1993, Lofroth et al. 2010, Lewis et al. 2012). By the early to mid-1900s, Washington was among the 19 states that no longer supported a resident fisher

population, and fishers were also absent from areas adjacent to Washington in northern Oregon, western Idaho, and southern British Columbia.

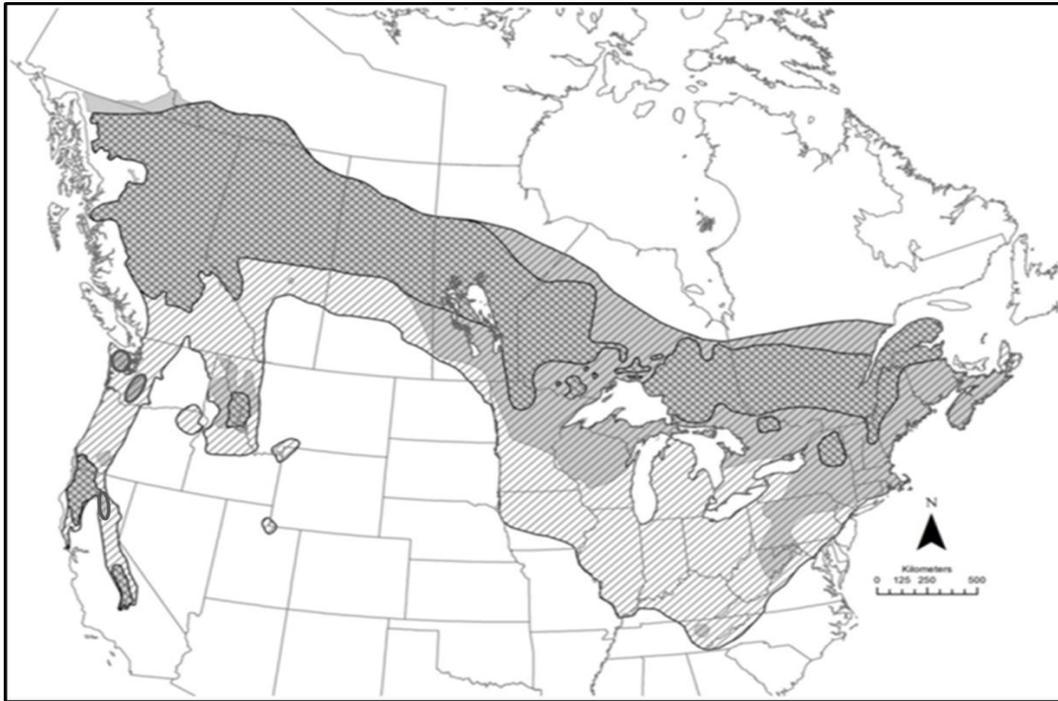


Figure 2. The range-wide distributions of the fisher (Lewis et al. 2012). The historical range is indicated by the diagonal hatching, which was reduced in extent to its most contracted range as indicated by the cross hatching, but then expanded as a result of conservation efforts to the current range as indicated by the dark shading. The dark shaded areas in western Washington (and in the northern portion of the Sierra Nevada in California) indicate areas where fishers currently occur as a result of recent reintroduction efforts; the establishment of self-sustaining populations in these areas is currently being investigated.

Washington. Historically, fishers occupied dense coniferous forests in western Washington from the coast to the eastern foothills of the Cascade Range (Lewis and Stinson 1998, Lewis et al. 2012). They were also known to occupy forests in northeastern Washington and may also have occurred in the Blue Mountains in southeastern Washington (Lewis and Stinson 1998). Currently, fishers occupy the Olympic Peninsula and the southern Cascade Range as a result of recent reintroductions (Figure 3).

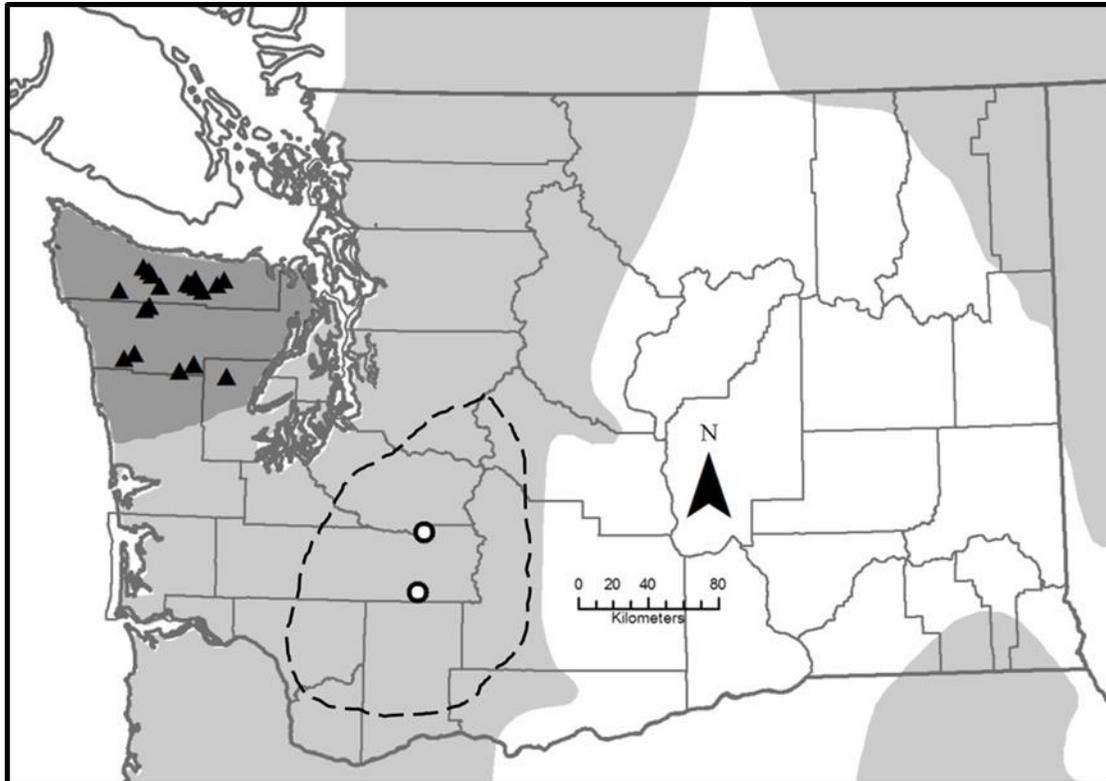


Figure 3. The historical range of the fisher in Washington (light shading; Lewis et al. 2012) and areas where fishers are currently present in the state. Fishers now occur on the Olympic Peninsula (dark shaded area; Happe et al. 2016; Figure 6) and recently released fishers with radio-transmitters have been located within a large portion (dashed line) of the southern Cascade Range (Lewis et al. 2017). Black triangles indicate fisher release sites (2008-2010) on the Olympic Peninsula and white circles indicate fisher release sites in the southern Cascade Range (2015-2017).

NATURAL HISTORY

Habitat Requirements. Fishers inhabit coniferous, mixed coniferous-deciduous, and deciduous forests in boreal and temperate forest ecosystems (Powell 1993; Lofroth et al. 2010). In western North America, fishers are known to occupy home ranges in landscapes containing dense coniferous-forest habitats, forested landscape mosaics dominated by mid- or late-successional forest stands, and managed landscapes that provide numerous large structures (large cavity trees, large snags, and large logs) commonly found in mature and old-growth forests (Lofroth et al. 2010, Weir and Corbould 2010, Weir et al. 2012, Aubry et al. 2013, Sauder and Rachlow 2014, Lewis et al. 2016).

Fishers are known to be selective of forested habitats at multiple spatial scales, including the landscape (Sauder and Rachlow 2014, Lewis et al. 2016), stand (Buck et al. 1994, Weir and Harestad 2003), and rest-site scales (Aubry et al. 2013). Sex-specific differences in habitat selection at the landscape scale were observed by Lewis et al. (2016), who argued that this selection likely resulted from the female's smaller size and increased vulnerability to other mid-size predators, especially bobcats (Wengert 2013, Wengert et al. 2013), and her need for a secure den site to rear kits. Females may select home ranges that

include a greater amount of older or unmanaged forests because these forests typically contain a greater numbers of large trees, snags and logs with cavities, which they need for den sites and security cover. Because of their large size, males are likely to be less vulnerable to predation by bobcats (Wengert et al. 2014) or coyotes and can exploit habitats that have greater densities of these larger species (e.g., regenerating forests, landscapes managed on short harvest-rotations, and forest stands with less overhead cover).

Diet and Foraging. While fishers appear to be selective of the forested habitats they occupy, their diet indicates that they are a generalist predator of small and mid-sized mammals, birds, reptiles and invertebrates as well as a consumers of carrion, fruits, seeds and fungi (Powell 1993, Martin 1994, Zielinski et al. 1999, Weir et al. 2005, Lofroth 2010). Snowshoe hares (*Lepus americanus*) and squirrels are common components of the fisher diet, especially in the northern portions of their range, but the fisher is most well-known for its ability to efficiently kill and eat porcupines (*Erithizon dorsatum*), while avoiding significant injury from their quills (Powell 1993). Preliminary data indicate that mountain beavers (*Apolodontia rufa*) may be an important part of the fisher diet on the Olympic Peninsula (Lewis et al. 2011).

Movements and Dispersal. Fishers are considered a wide-ranging carnivore because they occupy relatively large home ranges in relation to their body size (Powell 1993). They can also travel large distances (>50 km) after being released as part of a reintroduction (Roy 1991, Heinemeyer 1993, Proulx et al. 1994, Fontana et al. 1999, Lewis 2014). Conversely, the dispersal movements of fishers in resident populations largely occurred over shorter distances (<50km; Arthur et al. 1993, York 1996, Aubry et al. 2004, Mathews et al. 2013).

Reproduction and Survival. Fishers are born in late March and April, and females typically mate ≤ 10 days after giving birth (Powell 1993). The coincidence of birthing and mating is the consequence of delayed implantation, which is a common reproductive strategy among members of the weasel family and some other carnivores (see Powell 1993). Female fishers mate in the spring (April and May), and once their egg(s) are fertilized and develop into blastocysts, further growth is suspended and they float in the uterus for ~ 10 months. Increasing day-length triggers implantation of the blastocyst(s) in the uterus during late February or March, initiating an active gestation period of about 32 days.

During the breeding season, adult males can traverse large areas to find and mate with receptive females (Powell 1993, Lewis 2014). Adult males can mate with >1 female during the season and may compete with other males for access to reproductive females; juvenile males are considered ineffective breeders and may not move extensively to locate females (Powell 1993). Adult females can give birth to young each year, and litter sizes range from 1 to 4 kits. Females that are 1 year of age can become impregnated and give birth at age 2, however females >2 years old produce most of the litters. Kits are raised by their mothers, and surviving kits remain with their mothers until the late summer, fall or winter before becoming independent.

Annual survival rates vary by sex and age, and they tend to be greater where fishers are not commercially trapped (Krohn et al. 1994, Koen et al. 2007, Lewis 2014). In resident populations, annual survival rates for adult females (0.65-0.90) tend to be greater than those for adult males (0.45-0.88) and juveniles (0.27-0.84) (see review by Lewis 2014). Conversely, estimated survival rates of fishers released on the Olympic Peninsula were highest for juveniles, lower for adult males, and lowest for adult females (Lewis 2014). Differences between the age and sex-specific survival rates for resident and reintroduced populations may reflect adaptations that reintroduced juveniles and adult males have for occupying unfamiliar environments (Lewis 2014).

POPULATION AND HABITAT STATUS

North American Populations. Although fisher populations were extirpated from many states and much of southern Canada during the late-1800s to mid-1900s due to over-exploitation and loss of habitat (Figure 2; Powell 1993), those in the central and northern portions of Canada and in six distinct areas in the U.S. appeared to remain stable (Lewis et al. 2012). From the early to mid-1900s, fisher populations in many states and provinces were provided protection from trapping and, beginning in the 1940s, fisher reintroductions were used to restore fisher populations in many of these states and provinces (Lewis et al. 2012). Protection from trapping and reintroductions coincided with the restoration of fisher populations and an expansion of the fisher's current range in the late 1900s and early 2000s from ~43% to ~68% of its historical extent (Lewis et al. 2012).

Washington Populations. In Washington, fishers were provided protection from commercial trapping in 1933, however this did not facilitate fisher recovery in the state. Fishers were considered to have been extirpated from the state by the mid-1900s (Lewis and Stinson 1998), and reintroductions were determined to be the most effective way to recover fisher populations in Washington (Hayes and Lewis 2006). Recent reintroductions on the Olympic Peninsula (2008-2010) and in the southern Cascades (2015-present) were implemented to restore fisher populations within their historical range in Washington, and fishers are now known to occur in these areas (Figure 3); however, a reliable estimate of current population size on the Olympic Peninsula is lacking. Ongoing and future monitoring efforts are expected to reveal if and when self-sustaining fisher populations have become established in the reintroduction areas.

Habitat Status in Washington. A habitat suitability assessment was conducted as part of a reintroduction feasibility assessment for fishers in Washington (Jacobsen et al. 2003,

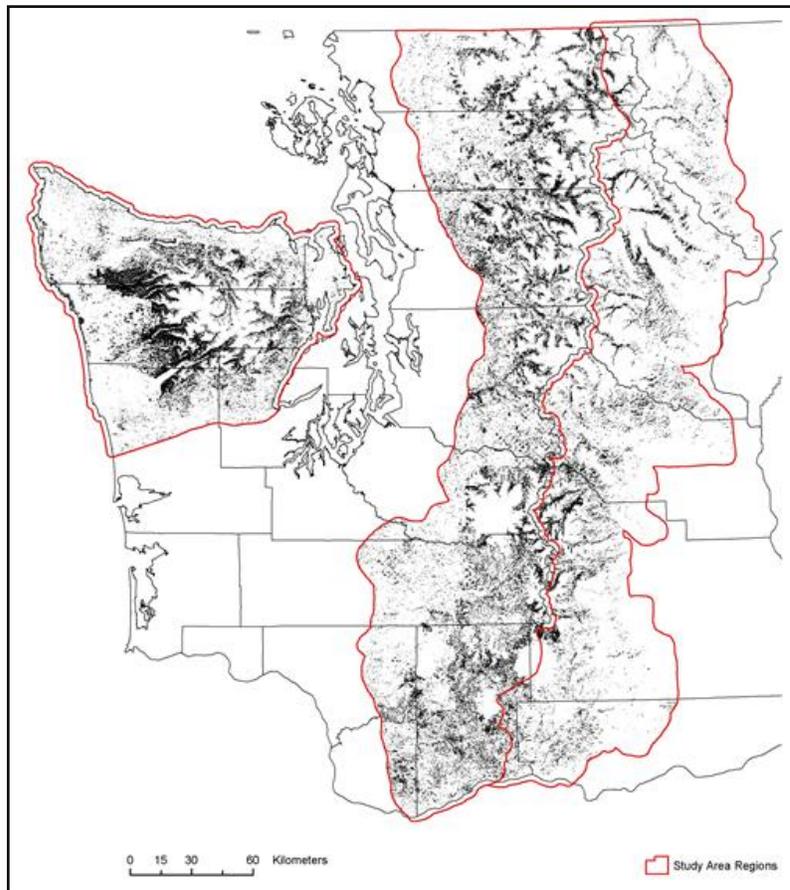


Figure 4. The distribution of suitable habitat (areas in black) identified on the Olympic Peninsula and in the Cascade Range of Washington (Jacobsen et al. 2003, Lewis and Hayes 2004). The Olympic Peninsula and the Cascade Range were chosen for the habitat assessment because they supported the largest remaining areas of late-seral conifer forests, which were considered important habitats for fishers.

Lewis and Hayes 2004). For the habitat assessment, suitable habitat was defined as dense forest at low- and mid-elevations that have large (≥ 20 inch DBH) overstory trees (Lewis and Hayes 2004). This assessment identified substantial areas and dense concentrations of suitable habitat within the fisher's historical range in Washington, including large portions on the Olympic Peninsula and in the southwestern and northwestern portions of the Cascade Range (Figure 4). Consequently, these three areas were identified as reintroduction areas in the Washington State Fisher Recovery Plan (Hayes and Lewis 2006). The extent of habitat identified in the habitat assessment is expected to remain relatively stable due to management guidelines provided in the Northwest Forest Plan (USDA Forest Service and USDI Bureau of Land Management 1994), which prescribes management activities on federal lands where most of the fisher habitat was located.

Population Trend and Viability. The population trend for fishers in Washington has been increasing since the reintroduction of fishers to the Olympic Peninsula (2008-2010) and to the southern Cascade Range (2015-2017). While reintroductions are pivotal for restoring fishers to these areas, continued monitoring (see Monitoring under Management Activities below) will be needed to determine if the reintroductions were successful at reestablishing self-sustaining fisher populations.

FACTORS AFFECTING CONTINUED EXISTENCE

Demographic Factors. The fisher has been extirpated from the state since the mid-1900s. Fisher reintroductions have been used in attempts to restore self-sustaining populations of fishers to the Olympic and Cascades Recovery Areas of Washington (Figure 5). Fisher recovery may be fully achieved if completed (Olympic), ongoing (southern Cascades), and planned (northern Cascades) reintroductions are successful at reestablishing self-sustaining populations in the Olympic and Cascade Recovery Areas. Failure to complete these reintroductions and their associated monitoring programs could prevent fisher recovery in a significant portion of its historical range (i.e., Cascade Recovery Area; Figure 5).

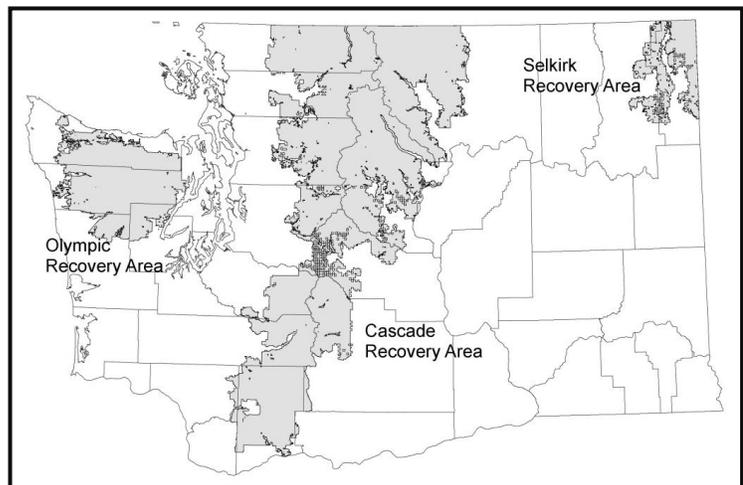


Figure 5. The fisher recovery areas of Washington (Hayes and Lewis 2006), which include the National Forest and National Park lands within the fisher's historical range in Washington.

MANAGEMENT ACTIVITIES

Habitat Management. The continued implementation of the federal Northwest Forest Plan (USDA Forest Service and USDI Bureau of Land Management 1994), continued implementation of Habitat Conservation Plans (HCPs) for some non-federal forest lands in western Washington (see summary of HCPs in Washington by Buchanan and Swedeen 2005), participation in the fisher Candidate Conservation Agreement with Assurances (CCAA) by non-federal landowners (45 landowners and

2,975,363 ac enrolled by February 2017), and adherence to State Forest Practice Rules (Title 222 WAC), are habitat management measures that occur within the fisher's historical range in Washington. These measures are expected to maintain landscapes and habitat conditions that will support self-sustaining fisher populations on the Olympic Peninsula, and in the Cascade Range.

Reintroduction. Reintroductions were identified in the Washington State Fisher Recovery Plan as the best approach to restore fisher populations in western Washington (Hayes and Lewis 2006). The goal of the reintroduction efforts is to reestablish self-sustaining populations within three portions of the fisher's historical range in Washington: the Olympic Peninsula, the southern Cascade Range, and the northern Cascade Range. Consequently, 90 fishers (50 F, 40 M; each equipped with a radio-transmitter) were reintroduced to Olympic National Park from 2008 to 2010 as the first step toward fisher recovery.

The second step in fisher recovery was a reintroduction initiated in the southern Cascade Range in Washington in 2015. From December 2015 to February 2017, 70 radio-transmitted fishers (38 F, 31 M) were released in the Gifford Pinchot National Forest (53) and in Mount Rainier National Park (16). Released fishers are currently being monitored via aerial and ground telemetry and are known to occur throughout much of the southern Cascade Range (Figure 3). Monitoring of this founder population will continue through 2018.

The third step of fisher recovery will be to initiate a reintroduction of fishers to the northern Cascade Range of Washington. This reintroduction effort will be initiated in the fall of 2017 and the goal is to release 80 radio-transmitted fishers (~40 F and ~40 M) over 2 years at release sites on the Mount Baker-Snoqualmie National Forest and in North Cascades National Park (Lewis 2013). Monitoring efforts associated with this reintroduction will occur from fall 2017 to fall 2020.

The reestablishment of a self-sustaining population in the Selkirk Recovery Area (Figure 5) is considered possible as a result of immigration from a recovering fisher population in Idaho. Consequently, reintroductions were not proposed in the recovery plan for this recovery area (Hayes and Lewis 2006).

Population Monitoring. To evaluate the long-term success of the Olympic Peninsula fisher reintroduction (2008-2010), monitoring was conducted from 2013 to 2016 to document the presence and distribution of fishers across much of the Peninsula (Happe et al. 2016). This project also aimed to use genetic sampling to identify first- and second-generation descendants as evidence of reproduction by the founder fishers and their offspring, and to assess the genetic characteristics and population size of fishers on the Olympic Peninsula. This was a first step toward determining if the fisher reintroduction resulted in a self-sustaining population. Although that determination of success has not yet been made, the initial results of the 4-year monitoring program indicate that fishers are widely distributed across the Olympic Peninsula (Figure 6) and that there has been substantial reproduction as evidenced by a large number of detections of descendants of the fishers that were released from 2008 to 2010 (Happe et al. 2016).

In the southern Cascade Range, the ongoing fisher reintroduction project includes monitoring efforts for evaluating post-release movements, survival, reproduction and home range establishment of fishers while their radio-transmitters are functional (~2 years). Using aerial and ground telemetry, biologists are evaluating indications of initial reintroduction success (annual survival rate >50%, home range establishment of >50% of individuals, evidence of reproduction) and adaptively managing the reintroduction (e.g., changing release locations) to increase the likelihood of establishing a self-sustaining population (Lewis 2013).

Research. The Olympic Fisher Reintroduction Project included research investigations into: 1) factors associated with the distance, duration, and outcome of post-release movements, as well as home range establishment (Lewis 2014), 2) factors associated with the survival of sex and age classes of released fishers (Lewis 2014), 3) sex-specific resource selection by released fishers (Lewis et al. 2016), and 4) the distribution, occupancy and genetic characteristics of reintroduced fishers (Happe et al. 2016). The ongoing Cascade Fisher Reintroduction Project will include these investigations (Lewis 2013) as well as investigations into the abundance of prey and predator species across the southern Cascades study area to evaluate their influence on fisher habitat selection.

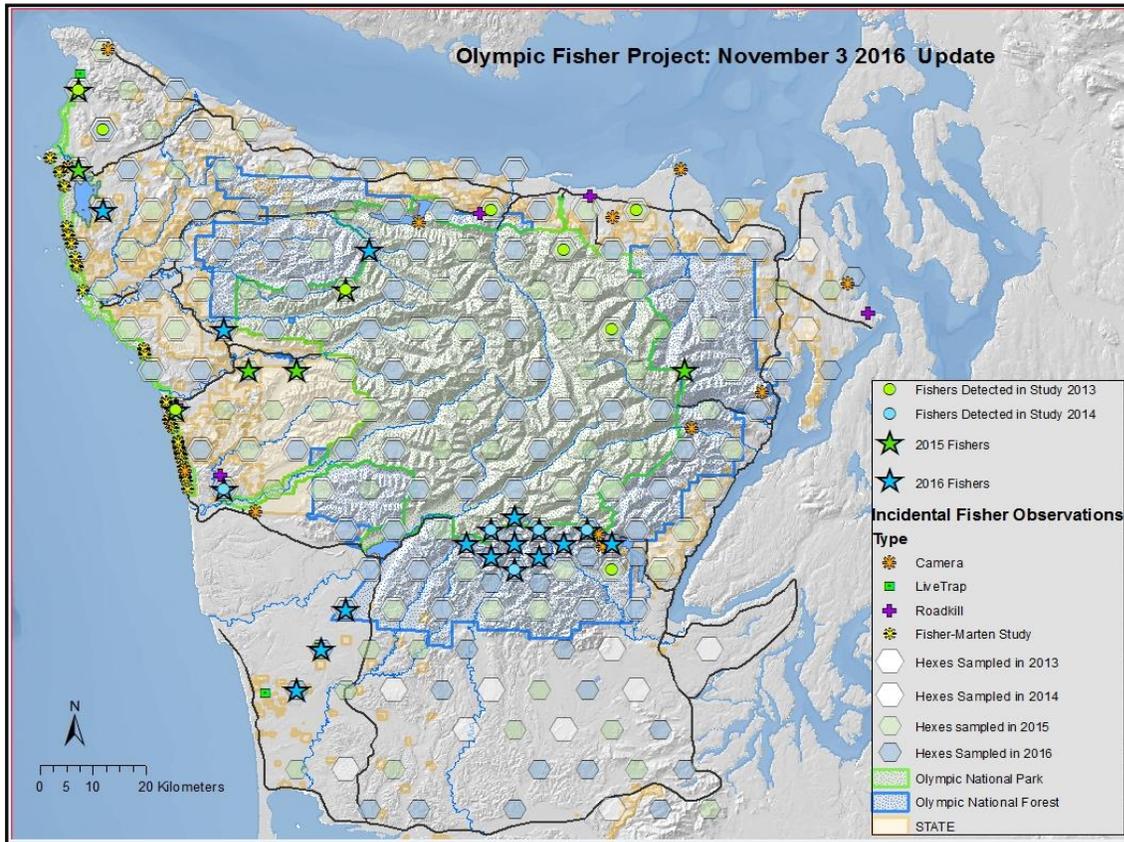


Figure 6. Survey detections and incidental detections of fishers across the Olympic Peninsula of Washington from 2013 to 2016 (P. Happe, Olympic National Park, unpublished data). These data are the product of a multi-agency survey conducted from 2013 to 2016 to assess the occupancy of fishers across the Olympic Peninsula and the long-term reintroduction success following the reintroduction of 90 fishers to Olympic National Park.

Partners and Cooperators. There has been substantial interest, investment and cooperation by numerous government, tribal, non-profit and private organizations in support of fisher recovery in Washington. Consequently, fisher restoration in Washington has been made possible by the collaboration of numerous conservation partners and cooperators including the National Park Service, Conservation Northwest, U.S. Fish and Wildlife Service, U.S Geological Survey, U.S. Forest Service, British Columbia Ministry of Forests, Lands and Natural Resource Operations, British Columbia Ministry of Environment, British Columbia Trapper’s Association, Washington State Trapper’s Association, Doris Duke Foundation,

Wildlife Conservation Society, Washington's National Park Fund, Defenders of Wildlife, Washington Department of Natural Resources, Makah Tribe, Quinault Nation, Elwha-S'Klallam Tribe, Nisqually Tribe, Cowlitz Tribe, Yakama Tribe, Tsilhqot'in Nation (BC), Secwepemc Nation (BC), and Dakelh Nation (BC), Port Blakely Tree Farms, Rainier Corporation, Washington Forest Protection Association, and the University of Washington.

CONCLUSIONS AND RECOMMENDATIONS

The fisher is a native carnivore that was extirpated from Washington state by the mid-1900s, mainly due to over-trapping in the late-1800s and early 1900s. Fisher reintroductions have been successful at restoring fisher populations in many parts of the species' range (Lewis et al. 2012); consequently, fisher recovery actions in Washington have included reintroductions of fishers to the Olympic Peninsula and southern Cascade Range. These reintroductions were employed because the threat of over-trapping no longer existed and habitat modeling efforts indicated that sufficient habitat exists within the fisher's historical range to support self-sustaining populations on the Olympic Peninsula and in the Cascade Range.

Although reintroductions and other conservation measures are expected to result in fisher recovery and down-listing in the State, we have not yet met the recovery objectives outlined in the Washington State Fisher Recovery Plan. Fishers can be down-listed from endangered to threatened status when self-sustaining populations are established in the Olympic Recovery Area and in the Cascades Recovery Area. They can be down-listed to sensitive status when 1) self-sustaining populations of fishers are established in multiple locations within the Olympic Recovery Area, and in the southern and northern portions of the Cascade Recovery Area, and 2) agreements and/or forest management plans for managing habitat on federal and state forest lands within the Olympic and Cascade Recovery Areas are in place to provide for the continued viability of fisher populations in Washington (Hayes and Lewis 2006). Existing agreements and management plans currently meet this second criteria, and these include the Northwest Forest Plan for federal forest lands, Habitat Conservation Plans on non-federal forest lands, non-federal landowner participation in the Washington fisher CCAA, and adherence to State Forest Practice Rules. However, because we have not yet determined that a self-sustaining population has become established in the Olympic Recovery Area and because reintroduction efforts were only recently initiated to restore a self-sustaining population in the Cascade Recovery Area, we have not yet met the first criteria to down-list fishers. Therefore, we recommend that the fisher retain its status as a State endangered species until its populations meet these down-listing criteria.

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References are organized alphabetically, by first author. The “code” column indicates the appropriate source category (level of peer review) for the reference, pursuant to RCW 34.05.271, which is the codification of Substitute House Bill 2661 that passed the Washington Legislature in 2014. These codes are as follows:

- i. Independent peer review; review is overseen by an independent third party.
- ii. Internal peer review; review by staff internal to WDFW.
- iii. External peer review; review by persons that are external to and selected by WDFW.
- iv. Open review; documented open public review process that is not limited to invited organizations or individuals.
- v. Legal and policy document; documents related to the legal framework for WDFW, including but not limited to: (A) federal and state statutes, (B) court and hearings board decisions, (C) federal and state administrative rules and regulations; and (D) policy and regulatory documents adopted by local governments.
- vi. Data from primary research, monitoring activities or other sources.
- vii. Records of best professional judgement of WDFW employees or other individuals.
- viii. Other: sources of information that do not fit into one of the categories identified above.

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APPENDIX A.

WDFW received responses to public comments during the 90-day public review period for the draft *Periodic Status Review for the Fisher in Washington* conducted from Date to Date 2017. WDFW received four individual comment letters from citizens via email. All four letters were supportive of our recommendation to maintain the status of the fisher as endangered in Washington state, and none of the comments resulted in changes to the Periodic Status Review (PSR) document.

WASHINGTON STATE STATUS REPORTS, PERIODIC STATUS REVIEWS, RECOVERY PLANS, AND CONSERVATION PLANS

Status Reports

2015 Tufted Puffin
 2007 Bald Eagle
 2005 Mazama Pocket Gopher,
 Streaked Horned Lark, and
 Taylor's Checkerspot
 2005 Aleutian Canada Goose
 2004 Killer Whale
 2002 Peregrine Falcon
 2000 Common Loon
 1999 Northern Leopard Frog
 1999 Olympic Mudminnow
 1999 Mardon Skipper
 1999 Lynx Update
 1998 Fisher
 1998 Margined Sculpin
 1998 Pygmy Whitefish
 1998 Sharp-tailed Grouse
 1998 Sage-grouse
 1997 Aleutian Canada Goose
 1997 Gray Whale
 1997 Olive Ridley Sea Turtle
 1997 Oregon Spotted Frog
 1993 Larch Mountain Salamander
 1993 Lynx
 1993 Marbled Murrelet
 1993 Oregon Silverspot Butterfly
 1993 Pygmy Rabbit
 1993 Steller Sea Lion
 1993 Western Gray Squirrel
 1993 Western Pond Turtle

Conservation Plans

2013 Bats

Periodic Status Reviews

2017 Leatherback Sea Turtle
 2017 Woodland Caribou
 2017 Sandhill Crane
 2017 Western Pond Turtle
 2016 American White Pelican
 2016 Canada Lynx
 2016 Marbled Murrelet
 2016 Peregrine Falcon
 2016 Bald Eagle
 2016 Taylor's Checkerspot
 2016 Columbian White-tailed Deer
 2016 Streaked Horned Lark
 2016 Killer Whale
 2016 Western Gray Squirrel
 2016 Northern Spotted Owl
 2016 Greater Sage-grouse
 2016 Snowy Plover
 2015 Steller Sea Lion

Recovery Plans

2012 Columbian Sharp-tailed Grouse
 2011 Gray Wolf
 2011 Pygmy Rabbit: Addendum
 2007 Western Gray Squirrel
 2006 Fisher
 2004 Sea Otter
 2004 Greater Sage-Grouse
 2003 Pygmy Rabbit: Addendum
 2002 Sandhill Crane
 2001 Pygmy Rabbit: Addendum
 2001 Lynx
 1999 Western Pond Turtle
 1996 Ferruginous Hawk
 1995 Pygmy Rabbit
 1995 Upland Sandpiper
 1995 Snowy Plover

Status reports and plans are available on the WDFW website at:

<http://wdfw.wa.gov/publications/search.php>



