Periodic Status Reviews Northern Spotted Owl, Snowy Plover, Western Gray Squirrel, and Greater Sage-grouse

> Penny Becker, Diversity Division Manager Joseph Buchanan, Natural Resource Scientist, Derek Stinson and Gary Wiles, Wildlife Biologists Wildlife Program Diversity Division

WAC Requirement

- Currently 46 listed species
- WAC 232-12-297 requires that we review the status of listed species every five years to determine if they require:

- Uplisting (e.g. sensitive to endangered)

– Downlisting (e.g. endangered to threatened)

– No change in status

As Defined by WAC 232-12-297

- 1) Endangered: "seriously threatened with extinction throughout all or a significant portion of its range within the state"
- 2) Threatened: "likely to become an endangered species within the foreseeable future throughout a significant portion of its range within the state without cooperative management or removal of threats."
- 3) Sensitive: "vulnerable or declining and is likely to become endangered or threatened in a significant portion of its range within the state without cooperative management or removal of threats."
- 4) None of the above: does not need to be listed



PSR Process

 Press Release Feb 2014, 2015, 2016- One year for interested parties to contribute information:



- Species demographics
- Habitat conditions
- Threats and trends
- Conservation measures
- New data since last status review
- Documents prepared with all contributed information
- WDFW biologist, then external expert review
- 90 day public comment period
- Comments integrated and responses compiled
- Periodic status reviews finalized



Species of Concern Threatened & Endangered Species

Land Mammals

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Birds

Reptiles & Amphiblans

Invertebrates

Conservation Funding

Priority Habitate & Species

Washington Department of Fish & Wildlife

Main Office Natural Resources Building 1111 Washington St. SE Olympia, WA 98501 380-902-2200 Get Directions

Mailing Address 600 Capitol Way N. Olympia, WA 98501-1091

> Phil Anderson Director

Species of Concern

Species Status Review

The Washington Department of Fish and Wildlife (WDFW) is embarking on a multi-year process to review the status of wildlife species listed as endangered, threatened or sensitive in the state.

The agency will consider approximately 15 species at a time and will seek information from the public for one year before concluding the reviews. This process allows WDFW to determine whether each species warrants its current listing or deserves to be reclassified or delisted.

Explanations for the status categories can be found on WDFWs Species of Concern Website.

The species evaluations will help WDFW and its partners to assess progress toward recovery of state-listed species. The process also will help WDFW to identify and prioritize conservation needs for these species.

Species Under Review:

Click on the species for more information

- Brown pelican
- Columbian white-tailed deer
- · Gray wolf
- Greater sage grouse
- Killer whale
- Marbled murrelet
- Mardon skipper
- North American lynx
- Pygmy rabbit
- Snowy plover
- Spotted owl
- Streaked horned lark
- Taylor's checkerspot
- Western pond turtle
- Woodland caribou

Updated status reports will be posted on the department's website beginning next spring. Additional public comment would be sought if WDFW proposes to change a species' status after concluding its review.

More Information on Species of Concern

- Threatened and Endangered Wildlife in Washington: 2012 Annual Report
- Washington State Species Status Report



Public Input

WDFW is accepting public input on the 15 species listed on this page until February 11, 2015.

WDFW is specifically looking for information on:

- Species demographics
- Habitat conditions
- Threats and trends
- · Conservation measures that have benefited the species
- New data collected since the last status review for the species



Written information may also be submitted via email to TandEpubliccom@dfw.wa.gov, or by mail to Penny Becker, Washington Department of Fish and Wildlife, 600 Capitol Way N., Olympia, WA 98501-1091.

Periodic Species Status Report Completion Schedule

2014 Batch (End public input Feb 2015)	2015 Batch (End public input Feb 2016)	2016 Batch (End public input Feb 2017)
Brown Pelican- E	White Pelican- E	Ferruginous Hawk- T
Columbian White-tailed Deer- E	Common Loon- S	Northern Leopard Frog- E
Gray Wolf- E	Peregrine Falcon- S	Grizzly Bear- E
Greater Sage Grouse- T	Fisher- E	Larch Mountain Salamander- S
Killer Whale- E	Gray Whale- S	Sea Otter- E
Marbled Murrelet- T	Humpback Whale- E	Margined Sculpin- S
Mardon Skipper- E	Sperm Whale- E	Olympic Mudminnow- S
North American Lynx- T	Mazama Pocket Gopher- T	Pygmy Whitefish- S
Pygmy Rabbit- E	Oregon Silverspot- E	Sei Whale- E
Snowy Plover- E	Oregon Spotted Frog- E	North Pacific Right Whale- E
Spotted Owl- E	Sandhill Crane- E	Blue Whale- E
Streaked Horned Lark- E	Leatherback Sea Turtle- E	Fin Whale- E
Taylors Checkerspot- E	Loggerhead Sea Turtle- T	Upland Sandpiper- E
Western Pond Turtle- E	Green Sea Turtle- T	Columbian Sharp-tailed Grouse- T
Woodland Caribou- E	Bald Eagle- S	
Western Gray Squirrel- T		



Today



Separate presentations on:

Northern Spotted Owl (Joseph Buchanan)
Western Gray Squirrel (Gary Wiles)
Greater Sage-Grouse (Derek Stinson)
Snowy Plover (Derek Stinson)

Time for questions after each species

• Decisions in February

STATUS OF THE NORTHERN SPOTTED OWL IN WASHINGTON



Washington Department of **FISH and WILDLIFE**

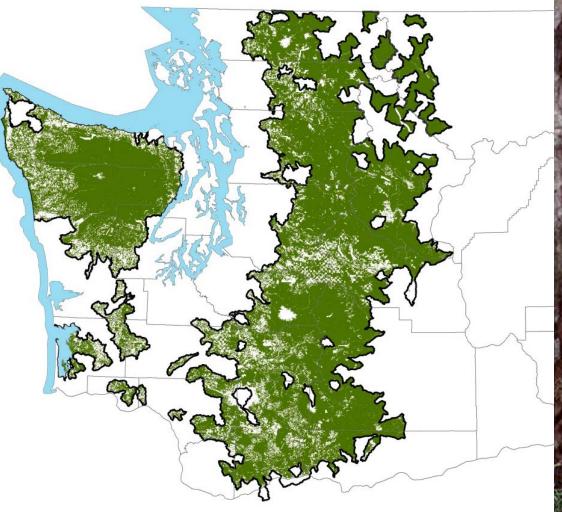
Joseph Buchanan Wildlife Program Wildlife Diversity Division January 2016

Listing Status

- 1988: designated as endangered by WA Fish & Wildlife Commission
- 1990: ESA listed as threatened
 - Loss & degradation of habitat
 - WDFW deferred to federal recovery plan



General Distribution in WA





Natural History

Habitat

- Nesting, roosting & dispersal
- Structurally complex mature and old forest
 - Large snags & downed wood, multiple canopy layers, moderate to high canopy closure
 - Mistletoe-infected trees in eastern Cascades



Home Range

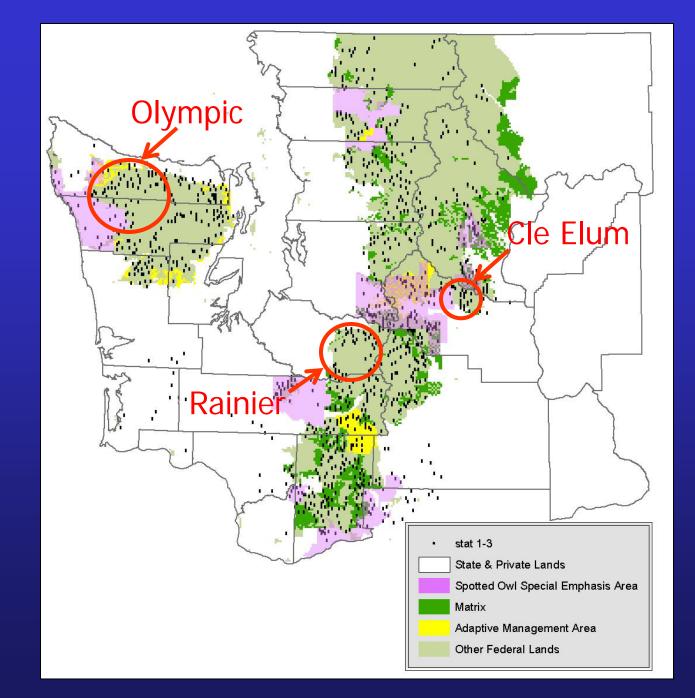
- WA home ranges are largest documented
- Olympic Peninsula median home range: 14,232 acres (4,411 - 27,298 acres), or a 2.7-mile radius circle
- Cascade Range: 1.8-mile radius circle



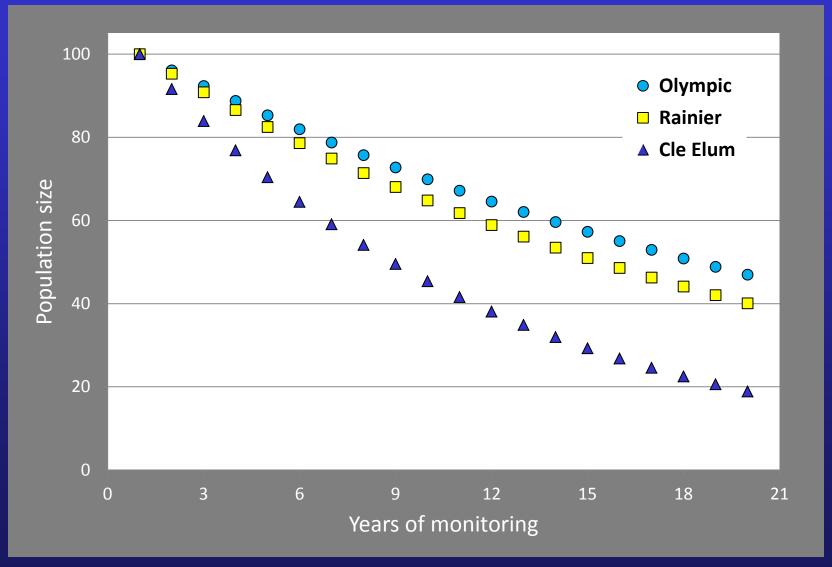
Population Status

Population Status

- NSO populations declining in 7 of 11 study areas range-wide (Dugger et al. 2016)
- Declines most substantial in WA and N. OR
- Three demography study areas in WA:
 - Cle Elum rate of change: -8.4% / year
 - Olympic NP rate of change: -3.9% / year
 - Rainier rate of change: -4.7% / year

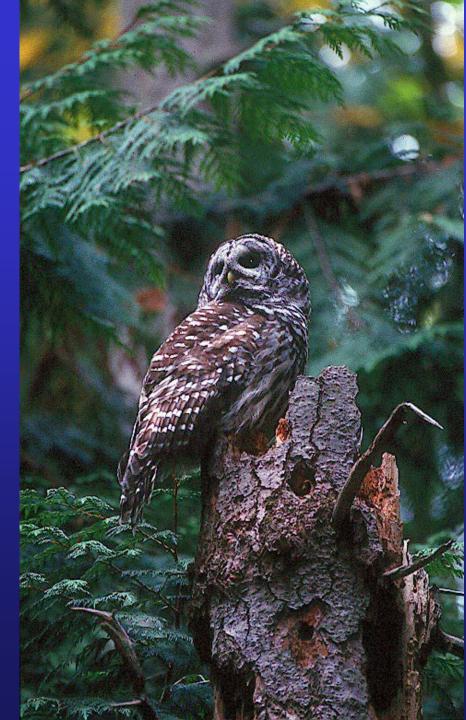


Rate of Change in Washington Study Areas



Limiting Factors

- Habitat loss
 - Harvest
 - Fire
 - Windthrow
 - Insects/disease
- Other factors:
 - Barred Owls
 - Predation
 - Weather
 - Disease (e.g. West Nile Virus)



Habitat Management Efforts

• Federal Lands:

Northwest Forest Plan, Critical Habitat, and Consulting with USFWS

 Private & State Lands: Habitat Conservation Plans, Forest Practices Rules

Habitat Loss in Washington

	Harvest	Wildfire	Insect	Other	Total loss	% loss from 1993
Federal	33,000	55,700	35,700	9,400	133,800	-4.8
Non- Federal	271,100	6,800	10,700	0	288,600	-31.2
Total	304,100	62,500	46,400	9,400	422,400	-11.4

Includes Net Habitat Values (Gains-Losses)

*Northwest Forest Plan 15 Year Report for NSO

Information is subject to changes and amendments over time

Competition with Barred Owls

- Barred Owls arrived in 1960s; now occupy entire Northern Spotted Owl range
 - Habitat & prey generalists
 - Much smaller home ranges
 - More productive
 - Greater dispersal ability
 - Larger & more aggressive



Barred Owl Removal Experiments

• U.S. Fish & Wildlife Service Environmental Impact Statement (2013)

• Study goals:

- A better understanding of the impacts of Barred Owl on Spotted Owl populations
- Assess ability to reduce Barred Owls to a level (with maintenance control) that permits Spotted Owl population growth
- Allow for an estimate of the cost of Barred Owl removal

Recovery Needs

Forest health & fire risk management in the eastern Cascade Range need to be addressed, especially given climate change effects



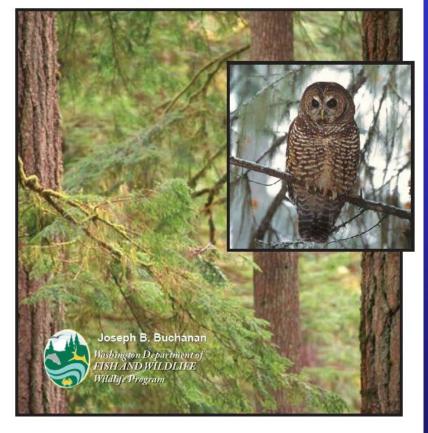
Recovery Needs

- Conservation incentives needed for nonfederal lands (e.g. safe harbor agreements, easements, mitigation banking)
- Outcome of Barred Owl removal experiments should inform feasibility and cost of maintenance control
- U.S. Fish and Wildlife Service conducting 5-year review and assessing federal status

STATE OF WASHINGTON

January 2016

Periodic Status Review for the NorthernSpotted Owl



Recommendation

Retain the Northern Spotted Owl as a state endangered species

Information is subject to changes and amendments over time.

Public Comments

- 30 letters/emails
- With 3 exceptions there was strong support for retaining the endangered status of the Spotted Owl
- 1 comment: Barred Owl removal not an effective use of federal funds
- 1 comment: Barred Owls and habitat loss are both very important concerns

Questions

Photographs: Jared Hobbs, Tracy Fleming, Lauren Burnes

Status of Western Gray Squirrels in Washington





Gary Wiles, Biologist Diversity Division, Wildlife Program

Western vs. Eastern Gray Squirrels

Western gray squirrel

Eastern gray squirrel

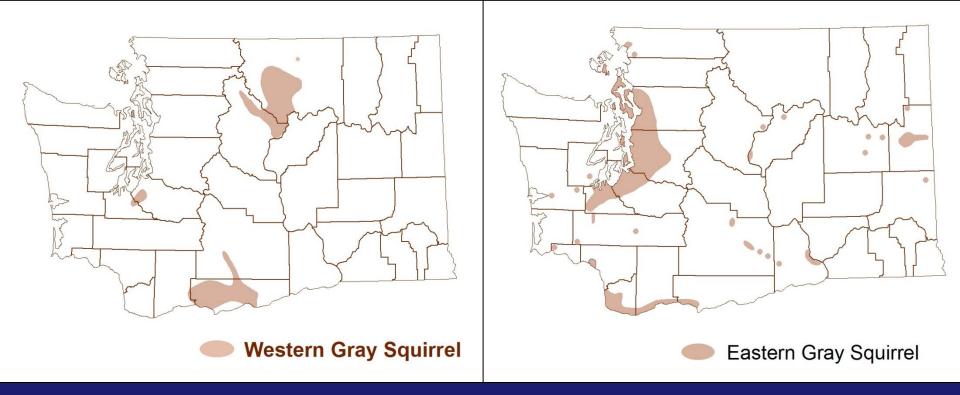


Larry McCombs



Andrew Redind

Western vs. Eastern Gray Squirrels



Natural History

• Distribution: northern Baja to Washington



Preferred habitat

- Conifer stands merging with oak, deciduous
- Ponderosa pine, Douglasfir, Oregon white oak
- Larger trees (>16" dbh) for food, nesting
- Interconnected canopy, open ground cover



Natural History

- Diet: fungi, conifer seeds, acorns
- 1 litter per year, averages
 ~3 young
- Most litters born from March to July
- Uses stick nests and tree cavities
- Home range: 45-1,100 acres

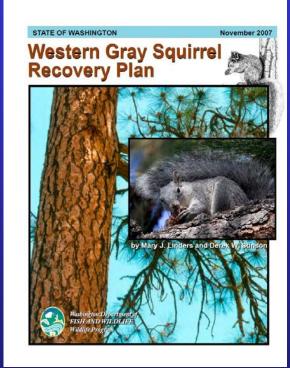
State Classification and Goal

State threatened since 1993

- 2005 Statewide population estimate
- 937 (range of 468-1,405) squirrels
- ~75% in Klickitat region

Objectives to downlist to sensitive classification

- Klickitat region 3,300 adults
- North Cascades 1,000 adults
- S. Puget Trough >300 adults
- Adequate measures protecting habitat



2016 Status Information

- Petition; Limited information available
- S. Puget Trough: probable translocations, habitat enhancement
- North Cascades possible
 wildfires
- Klickitat region possible
 habitat alteration
 - Preliminary habitat analysis 12% of habitat altered in last 10 years

Factors Affecting the Species

- Forest loss, degradation, fragmentation
 - Timber harvest, wildfires, fire exclusion
- Small population size
- Disease mange
- Other factors

 Climate change
 Highway mortality
 Introduced wildlife



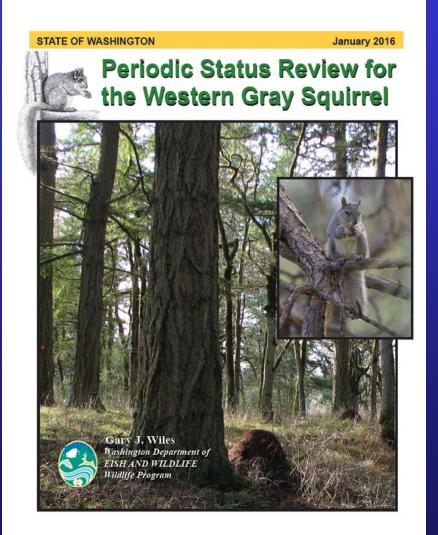
Matt Vander Haegen, WDFW

Recent Conservation Actions

- Updated Priority Habitats and Species recommendations
- Timber harvest guidelines for willing landowners
- Translocations to JBLM
- Habitat restoration
- Population surveys
- Research



Recommendation



Retain the Western Gray Squirrel as a state threatened species

Information is subject to changes and amendments over time

Public Comments/Concerns

- Support for continued threatened listing (8)
- Support for endangered listing (2)
- Opposed to listing (2)
- Neutral (1)
- Other comments:
 - Confusion over species ID (3)
 - Amount of habitat loss is greater than indicated (2)

Recovery Needs

- Information for next periodic status review
 - Results of 2015-2017 surveys
 - Results of an improved analysis of habitat change
 - Assessment of impacts of major fires
- Evaluation of whether the voluntary forest practices rule is working

Questions?



Ron LeValley

Rob Gilbert



Status of the Greater Sage-Grouse in Washington



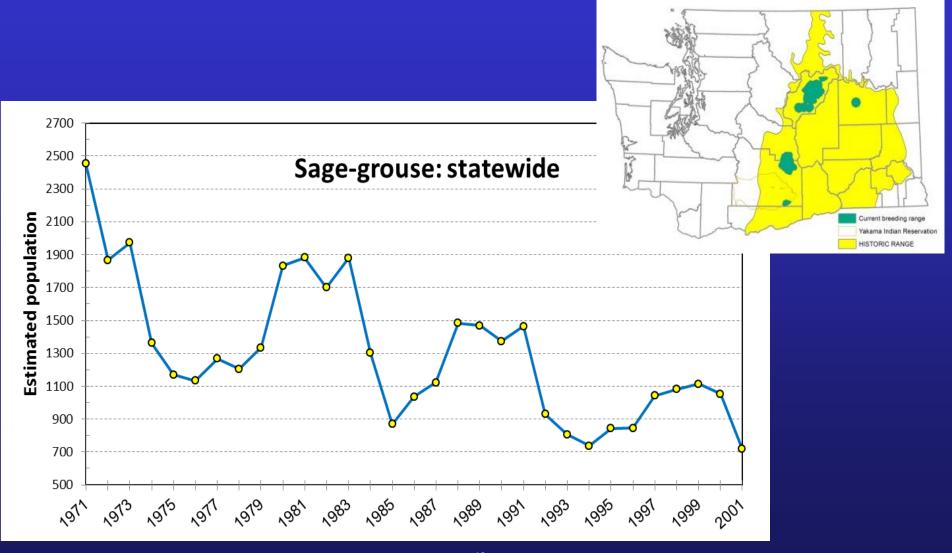
Derek Stinson, Biologist Wildlife Diversity Division Wildlife Program

Historical Decline in Washington

- Unregulated hunting
- Habitat conversion of deep soil areas
- Degradation of remaining habitat



Historical Decline in Washington



Current Classification of Greater Sage-Grouse

 State status: listed as threatened by WA's Fish and Wildlife Commission in 1998

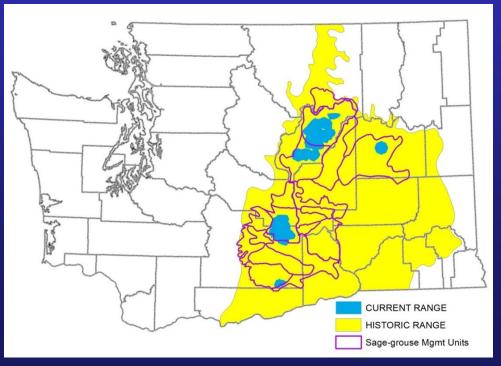


- Federal status: 'Distinct Population Segment' and candidate from 2001-2015
- FWS 2015: western subspecies no longer recognized, therefore it does not meet DPS criteria, not listable entity; not list range-wide

Conservation

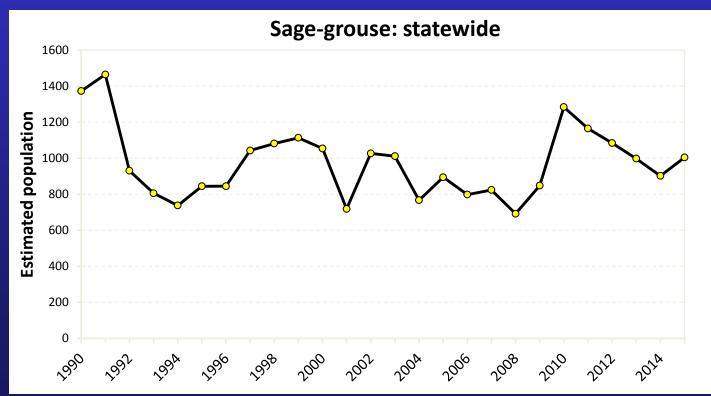
- 2004 Recovery Plan
- Objective for down-listing to Sensitive:
 - Average spring breeding population of >3,200 for 10 years
 - Active leks (breeding/ dancing grounds) in 6 management units



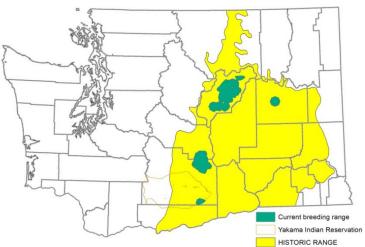


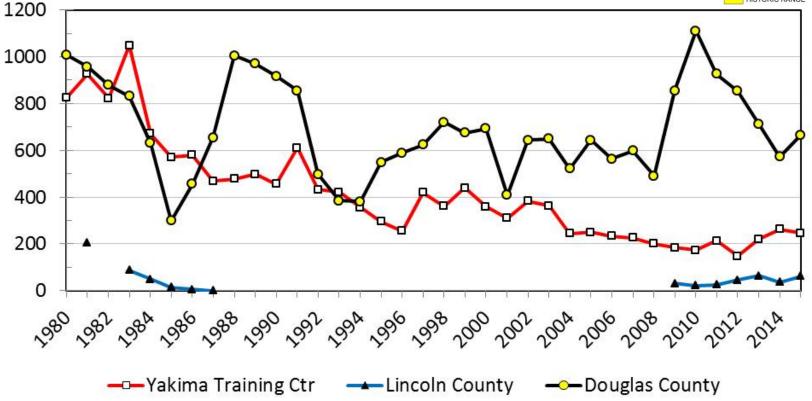
Population in Washington

- Recently ~stable
- 2015 population ~ 1,004 with active leks in 5 management units



Populations in Washington





Factors Affecting Sage-Grouse in Washington

- Habitat loss, fragmentation, degradation
- Higher populations of ravens
- Conservation Reserve Program (CRP) requires periodic Congressional reauthorization

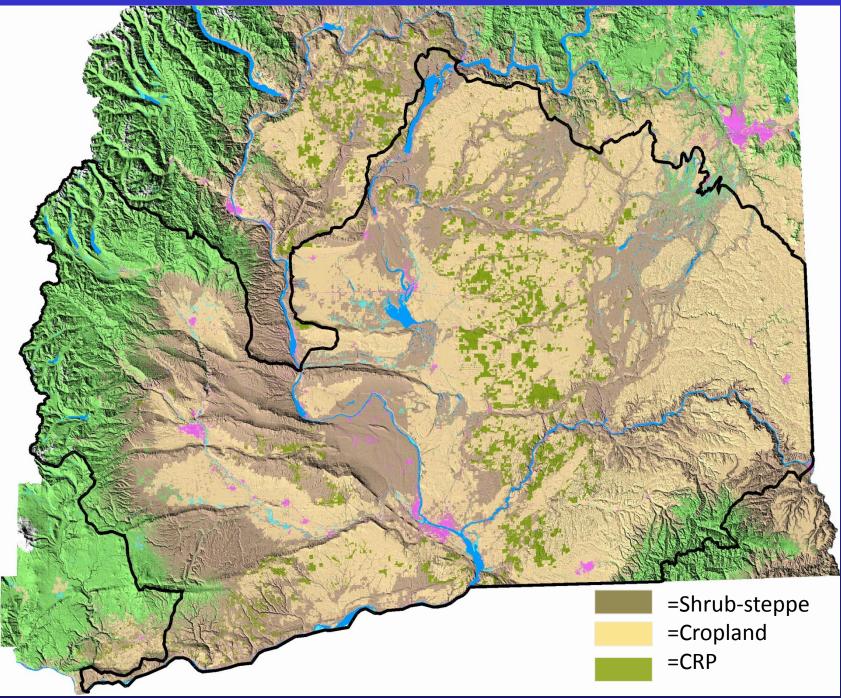


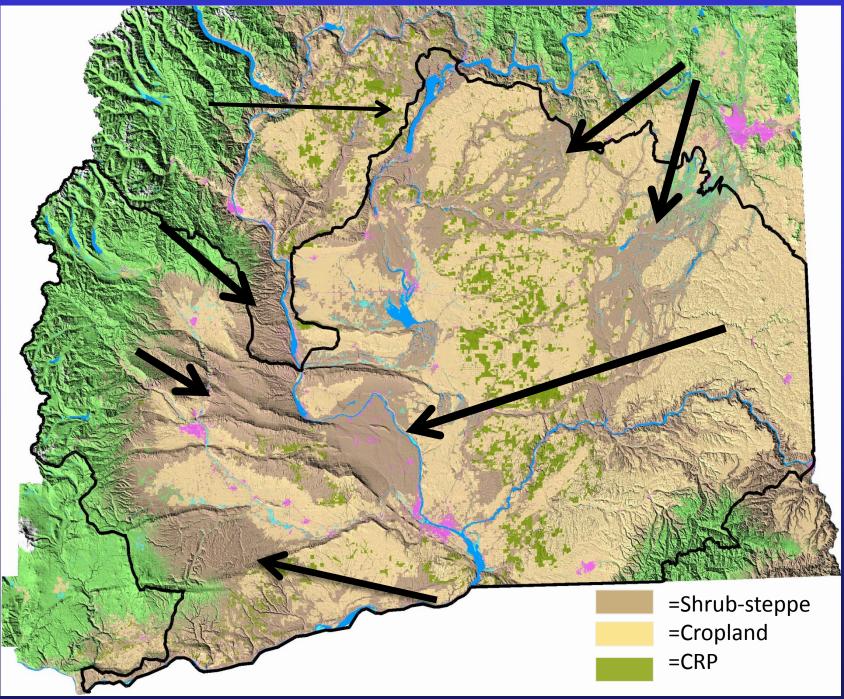
Factors Affecting Sage-Grouse in Washington

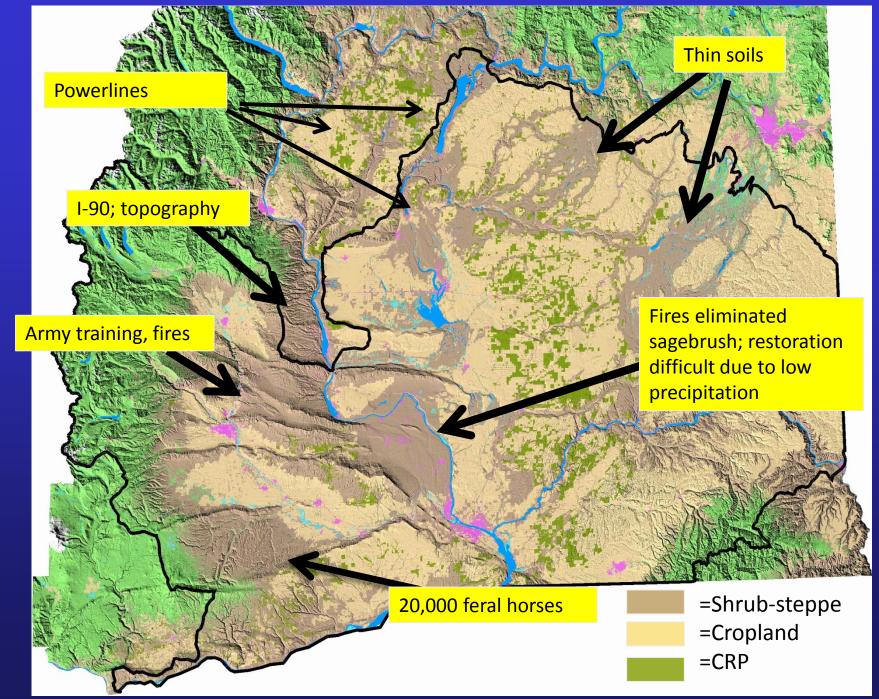
Fires: past and future Loss of sagebrush

Leahy Junction Fire, 2012

Carlton Complex, 2014: Wells Wildlife Area



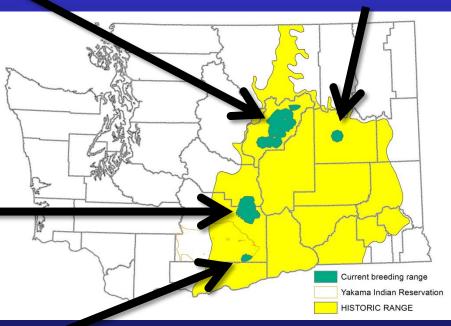




Conservation Actions: Habitat improvement

Sage-grouse/Sharptail S.A.F.E.(CRP): >60,000 ac Lincoln County habitat restoration (~2,500 ac on BLM and DFW land since 1996)

YTC planting sagebrush on 35,000 ac of burns; 77,000 ac 'protection area'





Fence marking to reduce collisions (~178 mi marked, 157 mi removed)

Yakama Nation feral horse exclosures

Information is subject to changes and amendments over time.

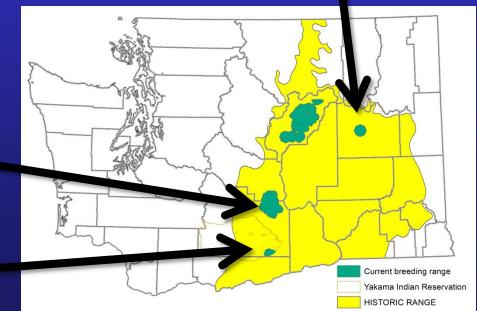
Conservation Actions: Translocation



Yakima Training Center genetic augmentations

Yakama Nation reintroductions

Lincoln County reintroductions (WDFW, BLM, WSU)



Lincoln County Reintroductions

Cooperative project with WDFW, BLM, WSU, ODFW

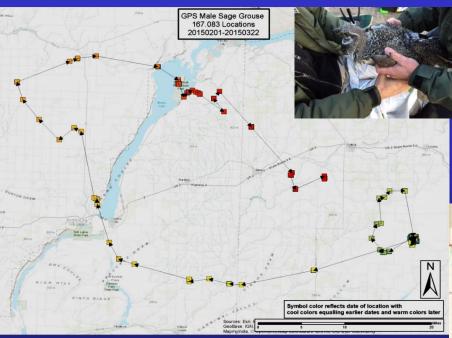
- 2008-2015: 277 birds from Oregon released
- 2015 estimate of 62 birds, one breeding lek



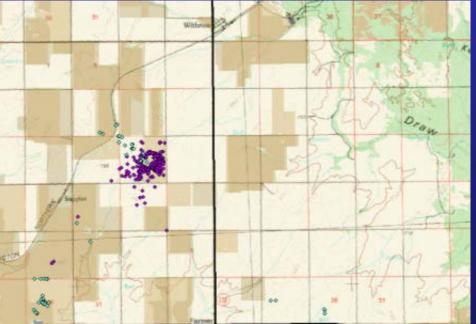


Information is subject to changes and amendments over time.

Conservation Actions: GPS telemetry

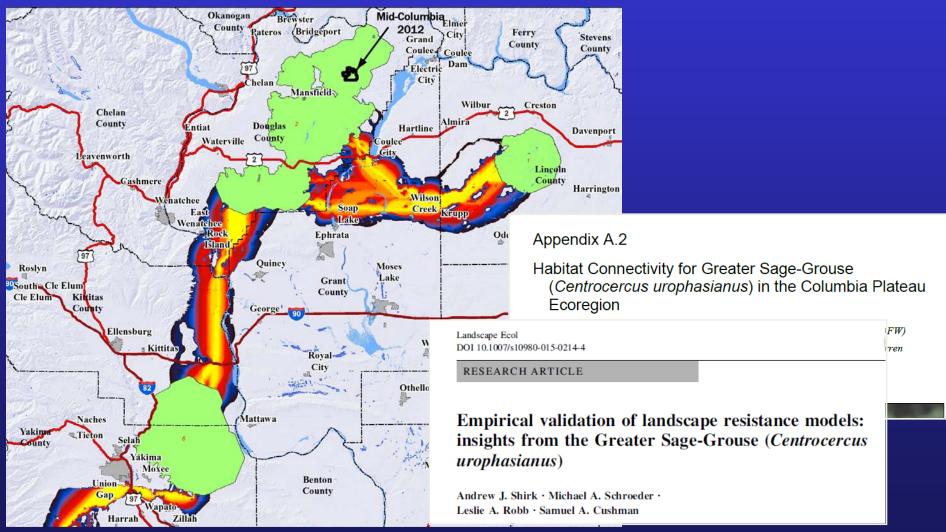


 Right: 2 males in CRP (dark tan) 5 miles from sagebrush habitat, in an area not previously known to be occupied by sage-grouse Left: Male sage-grouse movement between Lincoln and Douglas County



Information is subject to changes and amendments over time

Conservation Actions: Connectivity modeling



Conservation Plans: Douglas County GCP, SGI, CCAA



SGI Summary from 2010-2015

Over the last five years Washington's Sage Grouse Initiat landscape. There are now 44 SGI contracts in the state eff \$3,456,619 in core sage grouse management areas. Fiscal Environmental Quality Incentive Program (EQIP) to impr through sustainable ranching.

Building off of the success of the last five years, SGI is n million for the life of the new Farm Bill (2018). With SG funding dedicated to the protection of shrub-steppe habita approximately \$1.5 million through the Agricultural Cons Easements (ALE) program with \$230,000 already allocati develop grazing plans on an additional 41,000 acres of sh

Building off the success of NRCS's success, SGI in Wasl Management (BLM) and US Fish and Wildlife Service's worked with Washington Department of Fish and Wildlif over 405,000 acres of Douglas County with funding from high count of 16 males. This new lek accounts for a 6.3% also received two grants from the Partner's for Fish and V acres of wet meadow habitat in the Deep Creek Watershe The other project is working with a landowner to remove improving habitat for sage grouse across 3,840 acres of th (summer 2015) and the remaining 0.6 miles will be remo

There are now 28 contracts in Douglas County, 10 contra County, 1 in Adams County, and 1 with the Yakima Natic population and will continue to be the region we focus ou

The first year of Sage Grouse Initiative funding was 2010 CRP fields in perennial cover until another CRP sign-up (contracts, which delayed the removal of 19,005 acres of a

> FIND OUT MORE AT: www.wa.nrcs.usda.gov

Multiple Species General Conservation Plan

Douglas County, Washington



Prepared by:

Foster Creek Conservation District P.O. Box 428 203 South Rainier Waterville, Washington 98858

October 2014







The future of sage-grouse depends on the continued stewardship of working lands.

Contacts:

Cynthia Wilkerson Lands Conservation and Restoration Section Manager 360-902-2696 Cynthia.Wilkerson@dfw.wa.gov

Ann Larson WDFW Legislative Liaison 360-902-2226 ann.larson@dfw.wa.gov

Voluntary agreements protect sage-grouse and landowners

ONCE ABUNDANT THROUGHOUT THE AMERICAN West, greater sage-grouse have long been in decline in Washington state and throughout their historic range. Since 80 percent of the state's current sage-grouse population occupies private property in the Columbia Basin, the future of the species depends on the continued stewardship of those working lands.

To support these efforts, the Washington Department of Fish and Wildlife (WDFW) has been working with a variety of stakeholders on a strategy that would conserve sage-grouse while protecting landowners' livelihoods. Under a federal program called Candidate Conservation Agreements with Assurances (CCAA). landowners who agree to preserve sage-grouse can secure their operations against potential legal impacts if the species is listed for protection under the Endangered Species Act (ESA).

How a CCAA works

A CCAA is a voluntary agreement whereby landowners agree to manage their lands to conserve a species that may become listed under the ESA. In return, landowners receive assurances against additional regulatory requirements should that species ever be listed for protection under federal law.

Terms of these agreements are tailored to address the needs of the specific property in order to keep working lands working.

Wildlife species also benefit from these agreements, because conservation measures outlined in a CCAA are implemented before a species is listed for protection. In 2013, actions taken by landowners under these agreements have been credited with helping to recover – and avert listings for – three species (the greater and lesser Adams Cave beetle, and the dunes sagebrush lizard).

This CCAA is intended to be compatible with the federal Sage Grouse Initiative and related conservation programs funded through the federal Farm Bill.

USDA is an equal of

Contact you

may benefi

Recovery Needs

- Continued funding of Conservation Reserve Program (Farm Bill)
- Continued emphasis by BLM, NRCS, Yakima Training center, USFWS
 - Funding of Sage Grouse Initiative (NRCS)
 - BLM Resource Management Plan
 - Recovery grants
- Habitat protection/improvement
 - Connect existing populations
 - Improved wildfire prevention, suppression

Conclusion and Recommendation



- ~1,000 birds, 4 relatively isolated populations
- Largest (Douglas County) relatively stable for ~20 years
- We recommend the Greater Sage-grouse remain listed as threatened

Summary of 13 Public Comments

- 10 supported keeping the sage-grouse as threatened
- 1 recommended up-listing to endangered
- 1 recommended removal from protection
- 1 suggested captive rearing project
- 1 suggested updating the recovery plan, provided 19 pages of management recommendations



The End

Questions?

Photo Acknowledgments

Including: Mike Schroeder Kourtney Stonehouse Eric Braaten Kim Thorburn Rich Landers Juli Anderson Derek Stinson

Status of Snowy Plovers in Washington





Derek Stinson, Biologist Wildlife Diversity Division Wildlife Program



Pacific Coast population nests on sandy and gravelly substrates along the coast from Baja, north to Pacific and Grays Harbor counties in WA



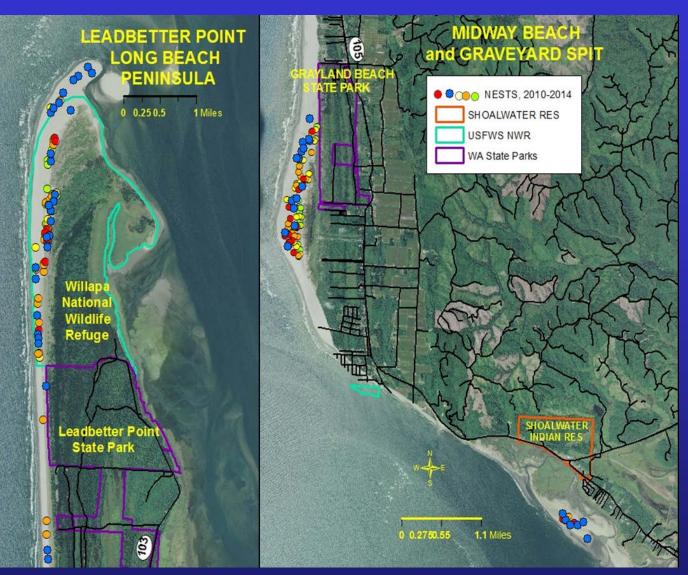
Natural History

- April July, Snowy Plovers nest in dry sandy areas
- Clutch size of 3



- Males rear the brood, often forage on wet sand
- Females leave, mate again and produce 2nd clutch (occasionally 3rd)
- Eggs, chicks often lost to predation





Plovers have nested on Midway Beach, Graveyard Spit, and Leadbetter Point

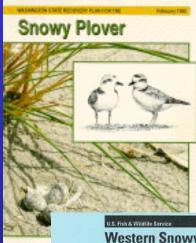
No nesting on Damon Point since 2006

Pacific Coast Population of Snowy Plovers

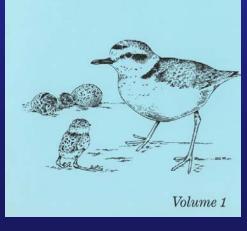


- Decline: ~78 historical nesting areas, down to 28 by late 1970s
- Threats: development, stabilization of coastal beaches, introduced beachgrasses, human disturbance, nest predation

Current Classification of Snowy Plover



Western Snowy Plover (Charadrius alexandrinus nivosus) Pacific Coast Population Recovery Plan



 State: listed as endangered in 1981, recovery plan completed in 1995

 Federal: Pacific coast population listed as threatened in 1993; federal recovery plan completed in 2007

Factors Affecting Snowy Plovers in Washington

Human disturbance during nesting season:

- Vehicles straying off the wet sand
- Busy razor clam digs
- Dogs off leash
- Kite flying



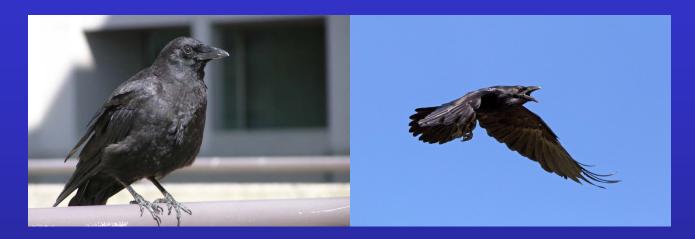
Factors Affecting Snowy Plovers in Washington



- Elevated numbers and presence of corvids due to human associated food
- Predation by corvids on eggs and chicks

Information is subject to changes and amendments over time

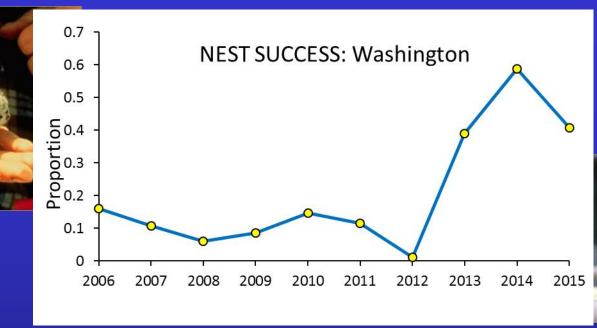
Conservation Actions



Management of predation began with nest exclosures in 2006

– But exclosures may increase predation on adults

- Direct predator management by USDA APHIS began in 2013
 - Began in Oregon in 2004

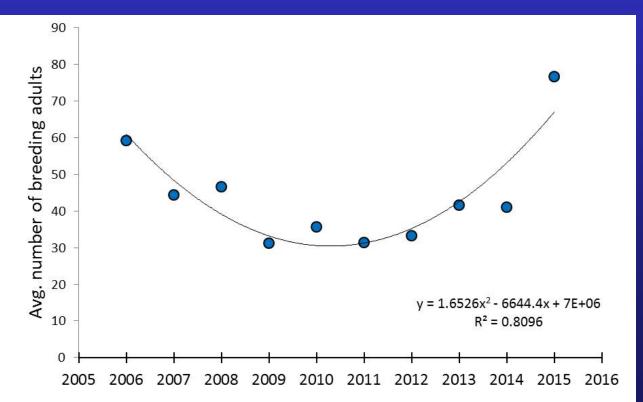




- 2015: 42 pairs, 69–77 chicks fledged in WA (highest since surveys began in 2007)
- In Oregon: predator management improved productivity
 - 1992-2001, plovers produced 351 fledglings
 - 2004-2014 (with predator mgmt) 1,286 fledglings

Population in Washington

 Annual breeding surveys show the recent decline has stopped and is beginning to reverse



Conservation Actions

Management of disturbance due to human recreation:

- Symbolic rope fencing along foot trails
- **Signage:** restrict access on the dry portions of the beach
- Enforcement: WDFW and USFWS coordinated during clam tides
- Portable toilets to reduce intrusions into closed nesting habitat
- Timing of spring clam seasons: to reduce impacts on nests and fledglings
- **Outreach:** brochures and biologist or officer presence





A Snowy Plover nests in the dry sand.

Watch for nesting birds

Nesting season for two federally protected shorebirds – the Snowy Plover and the Streaked Horned Lark – begins in spring when thousands of razor clam diggers are also on the beach. Wildlife managers ask that diggers take care to avoid disturbing these small birds by steering clear of their nesting areas. Both species are listed as threatened under the federal Endangered Species Act.

A Streaked Horned Lark chick sits in the dunes.





Watch your step: It would be easy to trample this Streaked Horned Lark nest and never know it.

For more information, contact:

Washington Dept. of Fish and Wildlife 48 Devonshire Rd. Montesano WA 98563 (360) 249-4628



Razor Clamming and Nesting Birds

How you can help protect Snowy Plovers and Streaked Horned Larks



Conservation Actions

Habitat Restoration

- Habitat Restoration Area on Leadbetter >400 ac
- Smaller restoration sites on Leadbetter
 State Park, Damon Pt (DNR)



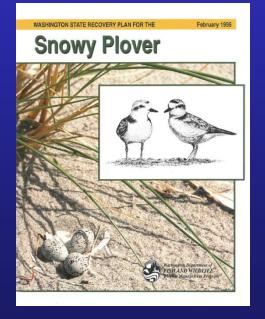
Recovery Needs

- Continued predator management
- Habitat restoration, maintenance at Leadbetter, Damon Pt.
- Management agreements to establish secure nesting areas
- Continued cooperation/improvement of disturbance
 - People management, outreach, enforcement (WDFW, WSP, USFWS)



State Recovery Objectives



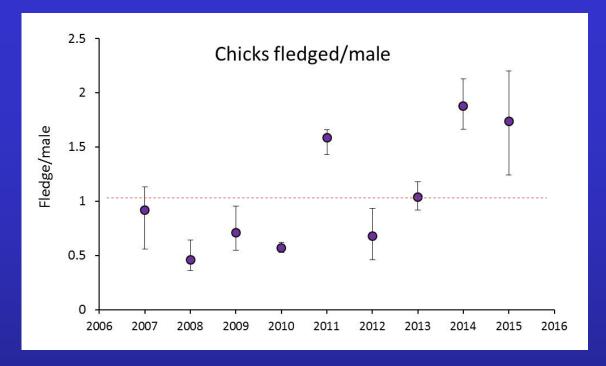


Average of \geq 1 fledgling/male Down-list to threatened when:

- 4-year average of <u>>25</u> breeding pairs
- 2 or more secure nesting areas

Down-list to sensitive when:

- 4-year average of <u>>40</u> breeding pairs
- 3 or more secure nesting areas



- Averaged >1.0 fledgling/male in 2011, 2014, 2015 (needed for threatened or sensitive status)
- 4-year average was 22 breeding pairs in 2014 at the two main sites; 26 in 2015
- 1 secure nesting area (need >2 for threatened)



Summary

- Snowy Plover population has begun to increase as a result of management actions in Washington and Oregon
- Need to secure additional habitat/nesting areas

Recommendation

• It is recommended that the Snowy Plover remain listed as an endangered species at this time.

Summary of Public Comments

- Of 27 public comments, 26 support keeping the plover as endangered
- 2 expressed support for habitat restoration
- 2 supported predator removal
- 4 supported reduction of human disturbance

Questions



nformation is subject to changes and amendments over time.

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