

U.S. Fish & Wildlife Service Fire on National Wildlife Refuges

The National Wildlife Refuge System extinguishes wildfires on its lands to protect communities and critical habitat, and reduce the spread of invasive plants.

- An average of 500 wildfires burn 260,000 acres of national wildlife refuge lands annually.
- More wildfires on national wildlife refuges occur in southern and eastern states than in the west, partly because of the relative size of the Refuge System's land base.
- Most of these wildfires are caused by human activity.
- Growth in human development and a greater number of refuge visitors is increasing the risk of human-caused fire.



Deer return to forage in a burned area near Grangeville, Idaho. (USFWS)



Crews monitor a wildland fire use project on Tetlin National Wildlife Refuge in Alaska. (USFWS)

Fire management has always been essential to most of our National Wildlife Refuges:

- More than 50% of refuge lands (including more than 90% of refuge lands in Alaska) are fire-adapted ecosystems, where healthy wildlife habitat depends on periodic fire.
- Wildlife refuges have been using prescribed fire since the 1930's to maintain health of their fire-adapted ecosystems.
- No other hazardous fuels reduction method can produce the same ecological benefits as wildland fire.

Fire use is a critical tool for reducing risk of wildfire on refuges and maintaining healthy ecosystems for wildlife and the visitors who enjoy the resources.

- Prescribed fire is by far the most cost-effective way to both reduce hazardous fuels and improve wildlife habitat.
- Mechanical or chemical methods to reduce hazards may be needed to prepare for the safe and effective use of prescribed fire.
- Once lands are restored to desirable conditions, they can be cost-effectively maintained with prescribed fire treatments based on natural fire intervals.
- Lands allowed to revert to previous, unmaintained conditions are much more costly to restore.



A prescribed burn managed at night on Sheldon-Hart Mountain National Wildlife Refuge in Oregon. (USFWS)

National Wildlife Refuges have 75 million burnable acres, including 24 million acres of forest and brushland, and 4 million acres of grasslands.



Distribution of Vegetation Type for Burnable Lands on National Wildlife Refuges

The Refuge System protects more than 700 communities and wildland-urban interface (WUI) areas around its boundaries.

- Many refuges are in or near urban areas. There is at least one refuge within an hour's drive of every major U.S. City and more urban refuges are being established every year.
- More than 50% of all new housing in the last decade was constructed in WUI areas, increasing fire risk and need for protection around refuges.
- In WUI around refuges, the National Wildlife Refuge System is committed to protect community infrastructure – parks, utilities, and watersheds – as well as neighboring homes and local businesses.

Program Resources and Capabilities

- Our annual fire program budget is about \$80 million.
- The Refuge System employs nearly 800 fire program staff. More than 3,000 U.S. Fish and Wildlife Service employees have also earned qualifications to support fire management.
- The Refuge System is a leader among agencies in the number of acres of hazardous fuels treated annually.
- The Refuge System treats fuels at the lowest cost per acre of any agency, due to staff expertise, low administrative costs, and the rarity of NEPArelated appeals due to effective collaboration and trust built with our local stakeholders.



Managing prescribed fire in the wildlandurban interface takes professional expertise and experience. Mississippi Sandhill Crane National Wildlife Refuge. (USFWS)

Current Challenges

- The fragmented nature of the Refuge System's land base means its staff is dispersed over broad distances.
- Some Refuge System lands have no suppression resources and no firefighters on site.
- The number and size of urban refuges is increasing each year, and development adjacent to refuges creates a pressing need for more prescribed fire and other fuels treatments in order to protect WUI communities.
- Current funding allows for only about half the annual hazardous fuels treatments needed to maintain refuges in desirable condition. A backlog of hazardous fuels treatments of 300,000 to 400,000 acres is carried forward year after year.
- The National Wildlife Refuge System must double the number of acres treated yearly with prescribed fire and other methods, in order to effectively protect wildlife refuges and the many growing communities that surround them.

To find out more about the National Wildlife Refuge System Fire Management Program, visit www.fws.gov/fire

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