Managing Invasive Plants: Concepts, Principles, and Practices

Management Methods: Prescribed Burning

PRESCRIBED FIRE IN ACTION

Slide1: Introduction

Prescribed fire can be used to enhance and maintain wildlife habitat, reduce hazardous fuels, protect human property and natural resources, and control some invasive plant species. Here are a few examples of how prescribed burning is used to manage vegetation on refuges and in other areas.

Slide 2: Marsh habitat at Pahranagat NWR, NV

Prescribed fire was used to remove encroaching cattails and bulrush from rare marsh habitat within Pahranagat NWR in the southern Nevada desert. Removal of these species helped to restore habitat for a variety of migratory waterfowl.

Slide 3: Phragmites control at Prime Hook NWR, DE

At Prime Hook NWR (Delaware), prescribed fire is integrated with other methods to control the nonnative, invasive grass *Phragmites*. Management objectives include reducing fire hazard, and restoring native vegetation and wetland habitat for migrating and wintering waterfowl.

Slide 4: Whooping crane habitat at Aransas NWR, TX

By changing plant community structure, prescribed burning is used to improve whooping crane habitat within Aransas NWR complex (Texas).

Slide 5: Seabird restoration at Maine Coastal Islands NWR, ME

Prescribed burning is a vital component of seabird restoration at Maine Coastal Islands NWR (Maine). Due to encroaching tall, dense vegetation, terns are forced to nest along the island perimeter where they are subjected to storms and predation by laughing gulls. Prescribed burning is used to create vegetation conditions that are more suitable to nesting terns and to facilitate location and destruction of predatory gull nests.

Slide 6: Melaleuca control at Big Cypress National Preserve, FL

The National Park Service uses prescribed fire to manage invasive *Melaleuca* trees at their Big Cypress National Preserve in Florida. *Melaleuca* is well adapted to survive and reproduce after fires so to be effective, prescribed burning treatments are carefully timed and combined with other methods.

Slide 7: Restoring saltcedar-infested sites at Bosque del Apache NWR, NM

Prescribed fire is used as part of an integrated approach to restore sites infested with saltcedar at Bosque del Apache NWR in New Mexico. Fires serve to clear standing

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dead saltcedar plants and piles of saltcedar debris left after chemical and mechanical treatments are applied.

Slide 8: Medusahead control in Cache County, UT

In Cache County, Utah, prescribed burning was used to remove thatch in the late summer followed by herbicide treatments to control newly emerging medusahead seedlings. The site was later seeded with desirable perennial range grasses.

Slide 9: Diffuse knapweed management in the Shoshone District (BLM), ID

The Shoshone District of the Bureau of Land Management in Idaho used prescribed burning to reduce seed production of diffuse knapweed.

Slide 10: Cogongrass control in Georgia

The University of Georgia and Georgia Forestry Commission conducted prescribed burns to remove thatch and prepare the site for herbicide treatments to control cogongrass. The burns were also used as an opportunity to train the Commission Foresters on fire behavior in cogongrass infestations.

Slide 11: Conclusion

Prescribed burning can be used as part of an integrated approach to achieve a variety of vegetation management goals.