



Common Techniques for Invasive Plant Control

Why control invasive plants?

Invasive, non- native plants are species introduced from other parts of the world that aggressively spread into intact native habitats. They can radically alter ecosystems by reducing plant diversity, changing fire frequency and intensity, interfering with native animal populations, and altering nutrient cycling. Many scientists now regard the encroachment of invasive species as a major cause of ecological degradation. Reducing the threat of invasive plants is essential to protecting the ecological integrity and visitor experience of Yosemite.

The following methods are commonly used for controlling invasive plants. Yosemite National Park is currently developing a Parkwide Invasive Plant management Plan / Environmental Assessment that will determine the criteria and methods for invasive plant control within the park.

Mechanical Removal

Mechanical Removal includes hand- pulling, tilling, and mowing.

Benefits:

- Selective; only target species are affected

Disadvantages:

- Labor intensive
- Disturbs ground

Fire

Fire includes both prescribed burns and hand- torching.

Benefits:

- Can cover large areas
- Reduces biomass

Disadvantages:

- Stimulates re- sprouting & germination
 - Impacts air quality
 - Runs risk of fire spreading
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Chemical Control

Chemical control denotes the use of herbicides

Benefits:

- Can be an effective initial treatment
- Effective against trees and shrubs

Disadvantages:

- Can affect non- native species
 - Cost (training, equipment, herbicide)
 - Potential toxicity
 - Difficult to schedule and coordinate
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Biological Control

Biological control uses the introduction of an herbivore (such as a beetle that consumes seeds) or pathogen (such as a fungus) that will infest invasive species.

Benefits:

- Will continue to work for many years
- Proven effective at treating large infestations

Disadvantages:

- Potential threat to non- target plants
 - Introduces another exotic species
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