

Cookbook for Biological Control of Exotic Plants

1. SELECT AN ENTREE

Define your park's ecological assets and identify the potential threats from exotic plants. Protection of coastal prairies, second growth forests or shrub communities may be some choices.

2. GATHER THE INGREDIENTS

Prepare an annotated list of the outstanding exotic plants. Rate each species on its pest status: toxic, aggressive, competitive, etc. Estimate the infested acreage and sketch a rough map of locations. Include a brief botanical biography, noting each plant's reproduction mode, requirements and general phenology.

3. ARRANGE THEM ON THE COUNTER

Arrange this list by priority based on your Park's policies and needs.

4. LOOK UP THE STANDARD REICPE

Use the NPS Computerized Literature Search service to augment your list and add new information. Concentrate on the top five species and limit the search to the last five or ten years.

5. CONSULT OTHER COOKBOOKS

Contact and develop open communication with all sources working on biological control. Typical sources include: local universities, federal, state and county agricultural departments, farm advisers, US Forest Service, Native Plant Societies, and other regional research centers.

Many of these contact will have a file of unpublished studies pertinent to your project. Often, they are looking for undisturbed sites to conduct biological control studies, and your park might become the beneficiary of their research at *no cost!*

6. PRE HEAT OVEN TO ENERGY EFFICIENT TEMPERATURE

Select and implement the most promising biological control program. Your contacts should help you obtain the necessary insect agents. Set up permanent plots and controls, measure the plant and insect populations regularly, treat some areas mechanically and/or chemically, and keep the biotechs busy monitoring the results.

7. BAKE THREE YEARS

Engender a patient optimistic attitude. Allow at least three years before a final evaluation. Keep in mind that biocontrol, once established, is a long term, self-sustaining, nearly cost free program.

8. SERVE TO EVERYONE

Share. Keep open communication with those local groups and agencies. Post a note on the NPS Bulletin Board Service. Publish your studies in appropriate journals, maybe even an article in *Park Science!*