VEGETATION MANAGEMENT GUIDELINE: Japanese Honeysuckle (Lonicera japonica Thunb.)

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Japanese honeysuckle readily invades open natural communities, often by seed carried by birds. An aggressive colonizer of successional fields, this vine also will invade mature forest and open woodlands such as flatwoods. This aggressive vine seriously alters or destroys the understory and herbaceous layers of the communities it invades, including prairies, barrens, glades, flatwoods, savannas, and floodplain and upland forests. Forests with either natural or unnatural openings are often invaded by Japanese honeysuckle when birds drop seeds into these light gap areas. Deep shading reduces the amount of invasion. Japanese honeysuckle also may alter understory bird populations in forest communities.

Japanese honeysuckle climbs and drapes over native vegetation, ultimately blocking light. It is capable of completely covering herbaceous and understory plants and climbing trees to the canopy. The semi-evergreen condition of this honeysuckle allows for growth both prior to and after dormancy of other deciduous plants. The prolific growth covers and smothers vegetation, including understory shrubs and

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trees in forested communities. Although this prolonged growth period is beneficial to the plant, it is also beneficial in controlling the plant. Vegetative runners are most prolific in the open sun and will resprout where they touch the soil, forming mats of new plants. But Japanese honeysuckle displays little growth under moderate shade, and in deep shade, runners develop but often die back. Flowering and seed development are heaviest in sunny areas. Seedling establishment and growth is slow in the first two years of development of a new honeysuckle colony.

Efforts to control Japanese honeysuckle infestations in areas of heavy and light infestation have included the following methods: mowing, grazing, prescribed burning, and herbicides. Although grazing and mowing reduce the spread of vegetative stems, neither method provides completely effective control. Mowing limits the length of Japanese honeysuckle vines, but will increase the number of stems produced. Grazing may have the same effects as mowing, but is less predictable because of the uneven treatment given by browsing animals. Prescribed burns or a combination of prescribed burns and herbicide spraying appears to be the best way to eradicate this vine.

In fire-adapted communities, spring prescribed burns can greatly reduce Japanese honeysuckle coverage and crown volume. Repeated fires have reduced honeysuckle by as much as 50% over a single burn. A previously burned population of honeysuckle will recover after several years if fire is excluded during this time. After honeysuckle coverage is reduced with fire, refined herbicide treatments may be applied, if considered necessary, using less chemical.

Because Japanese honeysuckle is semievergreen, it will continue to photosynthesize after surrounding deciduous vegetation is dormant. This condition allows managers to detect the amount of infestation, and allows for treatment of the infestation with herbicides while minimizing damage to the dormant vegetation.

Glyphosate herbicide (trade name Roundup) is a recommended treatment for this

honeysuckle. A 1.5–2% solution (2–2.6 oz Roundup/gal water) applied as a spray to the foliage will effectively eradicate Japanese honeysuckle. The herbicide should be applied after surrounding vegetation has become dormant in autumn and before a hard freeze (25°F). Roundup should be applied carefully by hand sprayer, and spray coverage should be uniform and complete. Do not spray so heavily that herbicide drips off the target species. Retreatment may be necessary for plants that are missed because of dense growth. Although glyphosate is effective when used during the growing season, use at this time is not recommended in natural areas because of the potential harm to nontarget plants. Glyphosate is nonselective, so care should be taken to avoid contacting nontarget species. Nontarget plants will be important in recolonizing the site after Japanese honeysuckle is controlled.

Crossbow, a formulation of triclopyr and 2,4-D, is also a very effective herbicide that controls Japanese honeysuckle. Crossbow should be mixed according to label instructions for foliar application and applied as a foliar spray. It may be applied at dormant periods, like glyphosate, and precautions given above for glyphosate should be followed when using Crossbow. Either herbicide should be applied while backing away from the treated area to avoid walking through the wet herbicide. By law, herbicides may be applied on public properties only according to label instructions and by licensed herbicide applicators or operators.

Herbicides that have given poor control results or that are more persistent in the environment than the above mentioned are picloram, annitrole, aminotriazole, atrazine, dicamba, dicamba & 2,4-D, 2,4-D, DPX 5648, fenac, fenuron, simazine and triclopyr.

## **GENERAL REFERENCES**

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