CAPE IVY

Delairea odorata

(formerly known as German ivy, Senecio mikanioides) Sunflower Family (Asteraceae)

DESCRIPTION

Cape ivy is a climbing perennial vine usually found in coastal and riparian areas and on disturbed moist sites. However, it is a highly adaptable species that will proliferate in a wide range of ecosystems.

Both the leaves and stems store water, making the plant drought-tolerant. A single leaf grows from each node and measures 1–3 inches long. The succulent leaves are smooth and bright green with pointed lobes. The underground stolons are purple. Cape ivy is commonly confused with native wild cucumber (*Marah fabaceus*), another vine with similar leaves. Unlike Cape ivy, however, wild cucumber has thicker stems, spiraling tendrils, hairs on the leaves, white flowers that bloom in spring, and spiny fruits.

REPRODUCTION

Cape ivy grows vigorously, particularly from February to June. It reproduces vegetatively by rooting from stem, stolon, or petiole (i.e., any part of the plant except the leaf blade) that touches the ground. Infestations can be spread by a variety of means, such as machinery or water, which carries fragments downstream. Cape ivy has no taproot, only shallow adventitious roots that grow to 4 inches deep in the soil. In areas with little summer moisture or with frost Cape ivy will experience some dieback, only to resume growth with the fall rains. Small, yellow flowers with green tips bloom between December and February. Cape ivy seeds have a

hairy apex and are wind-dispersed. However, most seeds produced in California appear to be sterile.

IMPACT

A dense, sometimes heavy, and continuous mat of Cape ivy can blanket native vegetation. Cape ivy contains alkaloids that are potentially toxic to fish.

KEY FACTORS

- u Reroots from fragments left in the soil.
- u Frequently grows among poison oak, stinging nettle, and blackberry.
- 11 Thrives near moisture.

TREATMENT OPTIONS

Removing Cape ivy requires precision, as every little part of the stem needs to be removed. Given the time and resources that controlling Cape ivy demands, practitioners have found it is sometimes advantageous to focus on removing the Cape ivy around the perimeter of a patch, rather than all-out removal. The control method chosen depends on patch size and isolation, the resources available for control, and the threats posed by Cape ivy to valued resources.

u Cut a containment line by clearing a strip of bare earth around the entire perimeter of a Cape ivy infestation, as if you were cutting a fire break. The strip should be roughly 1 yard wide, depending on site factors such as public visibility and soil moisture. This helps to prevent spread as Cape ivy grows more slowly on bare

soil. Begin from the edge of an area and work your way inward. You can sometimes peel back the edges of an infestation, where the vine is more lightly rooted, and roll the vegetation like a carpet. Tease or dig out stolons with a small Pulaski, fork, McLeod, or hand mattock if needed, following the runners to their source. Many hand tools work well. You can rake the soil surface several inches deep to comb out any remaining stems and roots fragments. Check the line periodically (4–6 times a year at moist sites; at least 2 times a year elsewhere) for Cape ivy spreading.

Some practitioners have used a more intensive approach—especially in riparian and dense scrub habitat—by clearing both native and invasive vegetation to establish initial containment/removal lines and access Cape ivy resprouts. This requires chainsawing limbs off trees and shrubs to about breast height. Make sure limbs are removed from the area as Cape ivy may also reestablish in debris piles. Rakes or McLeods can help to pull loosely attached vines climbing up a tree, or you can cut the vine with loppers and leave the ivy to die in the tree.

Sites cleared of Cape ivy may be vulnerable to erosion or colonization by other invasive species. When working next to a creek or river, work your way from upstream to downstream to prevent recolonization by stem fragments transported by water.

- u Cut and treat. Cut climbing vines with loppers and paint stems with herbicide. Because Cape ivy nodes break easily, it may help to place tarps on the ground around trees in order to catch any stem fragments that break as you work.
- u Graze. Some land managers have attempted using goats as a pretreatment. Audubon Canyon Ranch grazed 60 small female goats for 1 week on a half-acre site; the goats grazed the foliage but not the stolons.

DISPOSAL

Some practitioners pile the plant material on a tarp to dry out in the sun, making sure no roots touch the ground. The Cape ivy should break down quickly, especially if the piles are turned frequently. However, there is a chance that Cape ivy will sprout even after long drying. Establish and maintain a containment line around larger debris piles. As a final measure you can spray the piled debris with a weak glyphosate solution. Alternatively, bag all parts of Cape ivy and remove them from the site. You may also need to remove parts of native vegetation that have become entwined with the vine. Pile thoroughly cleaned woody debris separately, and chip it for mulch.

FOLLOW-UP

Some practitioners recommend revegetating immediately with low-growing species (if appropriate to your restoration project) in order to deter Cape ivy reinfestation. Return to the site as needed: more frequently for moist sites—approximately every 4–8 weeks—and perhaps as little as every 6 months for dry sites. Small Cape ivy plants can be hard to spot when growing in thick undergrowth and therefore easily overlooked, so check often. The strategy is to be responsive to regrowth and be persistent. Expect an eradication program to require 3–4 years when working on patches of less than an acre.

INTERESTING FACTS

Native to South Africa, Cape ivy was introduced to the US during the 1850s as an ornamental, and has since been used in landscaping and possibly erosion control.