Black Swallow-wort (*Cynanchum rossicum*)

Look: Perennial

– Twining herbaceous vine with dark green pointed oval leaves about 3-4" long by 2-3" wide occurring in pairs along the stem. Plants have rhizomes (root nodes) that sprout new plants. Grows in clumps of many stems, forming extensive patches. **Flower:** five-petaled star shaped dark purple to almost black with white hairs, about ¼"across, in clusters. **Fruits:** slender tapered pods, 2 to 3" long by about ¼" wide, turning from green to light brown as they mature.

Black Swallow-wort flowers are tiny at ¼" across

Issues: Extremely aggressive and resilient forming dense thickets that overrun native plant communities. Once established, a colony is extremely hard to eradicate. Root fragments left in the soil will re-sprout. Swallow-wort re-sprouts vigorously following any cutting or mowing. There is also concern that monarch butterflies will lay eggs on swallow-wort instead of milkweed; the hatching caterpillars cannot develop on swallow-wort.

Control: Mechanical

The best method for small patches or for maintenance after reclamation of an area is to hand dig the plants making sure to include as much of the root system and rhizomes as possible. If the Swallow-wort does not have mature pods when pulled then leave the pulled plants out to dry and then compost or mulch the dead plants. If it does, bag the pods before disposal. One possibility is to bag the pods in a paper leaf disposal bag and burn it during the burning season. With larger patches it is important to keep the plants from going to seed. In open areas, mow in July as flowers and immature pods are forming. This will allow some plants to re-flower so at least one follow-up mowing will be necessary in August or September (depending on growing conditions). The rhizomes are very hardy though so if you miss your follow-up mowing, the plant will be allowed to re-supply energy to the rhizomes. Multiple mowings after the initial flowering accomplishes two things; it further taxes the reserves in the rhizomes and prevents the plants from re-seeding. If the patches are in difficult places (i.e. under bushes, in fences) cutting then covering with 6-12 inches of mulch (clipping any vines that find their way to the surface) may be a solution. This will need to be done for 2 or more years.

The vines twist upon themselves creating a climbing support.

Get it before the pods open!! This happens in the late summer/early fall.

Careful application of herbicide may also be an option in certain areas. Unless you have an extreme problem with black swallow-wort I would recommend using any other non-chemical control.

If you are considering using chemical control remember:
Like any weed control method, herbicides will fail if used incorrectly. Because black swallow-wort thrives in suburban and urban environments as well as natural areas, herbicide exposure to pets, people, and wildlife must be considered in choosing the most appropriate product for your particular weed control program. Furthermore, using any herbicide correctly means using:

- **An herbicide which has a label allowing applications on the particular use site**;
- **The correct concentration (rate);**
- **An adjuvant if recommended** (adjuvants are spray solution additives that may make the herbicide more effective);
- **The right application method;**
- **The correct timing to coincide with plant susceptibility.**

As always with herbicide use, carefully read and follow all use directions and any restrictions or precautions listed on the product label. If in doubt, contact your local extension agent, pesticide dealer, Department of Agriculture, or the herbicide manufacturer for advice or clarification.

Two systemic herbicides - Garlon® 4 (triclopyr ester) and Roundup Pro® (glyphosate) – have been found to be effective in controlling swallow-wort. These herbicides should be applied when plants are actively growing, after flowering has begun. DO NOT SPRAY TOO SOON. Avoid the temptation to spray the plants as soon as they emerge in May. Only when the plants flower will they be large enough to receive enough spray on the exposed leaf surface to deliver a killing dose to the roots. Plants that are sprayed before pods form will probably not produce a viable seed crop that season. Be patient. Systemic herbicides do not cause a “burn down” of plants like contact herbicides do. Within 1-2 weeks the plants will look sick. There may be dead tissue spots on most leaves many yellowing leaves. Do not waste herbicide, money or effort by spraying plants twice. Sick plants cannot effectively absorb the herbicide through the leaf surface or move the herbicide to the roots. Swallow-wort control may take a few years and it is important not to use more herbicide than is necessary.

Cut stem application

For cut stem applications use a 50 to 100% solution of herbicide concentrate. Roundup Pro® is much more effective than Garlon® 4 for cut stem application. Apply the herbicide solution immediately to cut stem surfaces. As mentioned above with foliar applications, if treated plants have mature pods the seeds may ripen after treatment and disperse, leading to new infestations. If possible, cut plants low and bag and dispose of the portions with pods.

Foliar application

Experience shows that foliar sprays of systemic herbicides (i.e., herbicides absorbed into the plant and carried internally) only kill plants in the upper layers of the infestation, requiring repeated applications to effectively control the entire mass. It is important to treat plants before pods begin to form to ensure that viable seeds are not produced. If that is not possible, plants with pods should be cut or mowed first and then sprayed once they regrow. Regrowth will be rapid in summer. Herbicide application to the new growth should be conducted from August through early September. If mowing is not possible, for example in wooded areas, cut plants by hand just below the lowest pods, and spray the new growth. In situations where foliar sprays are undesirable, for example when desirable native plants or other non-targets would be harmed, sponging the herbicide on individual plants, using the same concentration as foliar sprays is an option.

Plant Conservation Alliance: Alien Plant Working Group- http://www.nps.gov/plants/alien/fact/cylo1.htm

You may be able to hire a ***trusted ecological landscaper*** to apply the herbicide for you.