

# WILD PARSNIP ERADICATION

**CAUTION: IN UNDERTAKING ANY WILD PARSNIP ERADICATION EFFORT IT IS IMPORTANT THAT YOU ACQUAINT YOURSELF WITH ALL THE NECESSARY SAFETY PRECAUTIONS AND THAT YOU WEAR PROTECTIVE CLOTHING AND GOGGLES THAT COVER EXPOSED SKIN.**

Below are outlined some fundamental factors that will assist in both understanding the growth and spread of wild parsnip as well as some basic factors in understanding effective wild parsnip eradication. The second page provides more specific details in wild parsnip eradication options.

## WILD PARSNIP FUNDAMENTALS

NOTE: The most crucial fundamental factor in wild parsnip growth management is to prevent the wild parsnip plants from going to seed. Every wild parsnip plant that is allowed to go to seed will create upwards of 950 new wild parsnip plants over the next four years.

### Lifecycle Fundamentals:

1. Wild Parsnip is a biennial plant meaning it normally has a life span of 2 years.
2. Wild Parsnip does not flower during its first year of growth.
3. Contact with non-flowering 1st year wild parsnip plants is just as dangerous as with mature 2nd year plants.
4. Wild Parsnip normally forms seed heads in late June thru early July during its second year of growth.
5. Wild Parsnip seeds become viable approximately 3 weeks from the time they first flower.
6. Wild Parsnip plants permanently die after going to seed in their second year of growth.

### Eradiation Fundamentals: (Second Year Plants)

Because wild parsnip plants normally die after going to seed in their second year of growth it can be controlled by removing the seed heads from the second year plants as soon as the seed head forms. The outcome is a plant that has died and left no seeds for further growth. Removal of seed heads can be accomplished by:

1. Flowering wild parsnip (2nd year plants) should be allowed to form the flower head before cutting
2. Timely mowing (During the three-week window from when it first flowers and when seeds are viable)
3. Cutting off seed heads with hand cutters
4. Manually removing the plants by pulling or digging
5. Chopping the roots with a shovel below the root crown
6. Spraying the plants with an appropriate herbicide spray

Note: An exception to the rule is that if eradicating through the use of herbicides it is best done early in the season while the plants are smaller. It is still effective in June or July but as the summer progresses the kill rate with herbicide spray is somewhat reduced.

## **Eradication Fundamentals: (First Year Plants)**

1. First Year Plants do not form flower heads
2. Mowing often requires multiple applications for eradication
3. First year plants should be considered just as dangerous as the second year plants
4. Manually removing the plants by pulling or digging is effective for smaller patches
5. Chopping the roots with a shovel below the root crown is effective
6. Spraying the plants with an appropriate herbicide spray is very effective

## **MOWING**

- Mowing is a very effective management solution during certain times of the year and where terrain is conducive to reaching the plants with the mower. Poorly timed mowing can increase the number of seedlings and the percentage of plants surviving to maturity. The best way to control the spread of Wild Parsnip and keep it at bay is to mow or “weed eat” it just when the flower buds are beginning to show (somewhere between late June and early July). To mow or use the weed eater later in the season will actually contribute to spreading the seeds and therefore expand the area of Wild Parsnip infestation.
- Some plants will re-sprout or flower late, so follow-up mowing or spot-cutting is often necessary.
- If parsnips are mown with a rotary mower, it is very unlikely that there is enough juice in remnants of stem to produce seeds, so mowing with a rotary mower during the late June through early July period can be very effective.
- Continue mowing for at least five years to exhaust the seed bank. Be especially careful when using mowers, weed whips, mechanical string trimmers and other such devices. They tend to spray users with juice and bits of the plants, sometimes leading to hundreds of blisters on exposed skin.
- Wear goggles and protective clothing when mowing.

## **ROOT DESTRUCTION**

- A very effective method of destroying smaller isolated patches of Wild Parsnip is destroying the plant root. It is best to cut through the tap root below the crown with a shovel or spade in order to control these plants.

## **HAND PULLING**

- The best control is achieved mainly through hand-pulling. Although this method will kill the plant, it is not practical for large infestations. Where dealing with mature seed heads on plants consideration can be given to carefully removing the seed heads. The seed heads can be cut off and dropped into garbage bags or other containers for safe disposal. This will prevent further spread of the plant and ultimately can result in ridding the area of Wild Parsnip

## **HERBICIDE CONTROL**

- To date the most efficient/effective means of eradicating large patches of Wild Parsnip is through herbicide spraying.
- Ideal times for application of effective herbicides are in the spring and early Summer and again in the fall. Mowing may be more effective in the interim time period.
- The optimal time to eradicate Wild Parsnip with herbicides is when this biennial weed is in the rosette stage.

## **BURNING**

- Prescribed burns will not kill established plants; they will re-sprout from their taproots.
- Fire often kills newly sprouted seedlings.

## **BIOLOGICAL CONTROL**

- To date, no effective biological control agents have been identified for Wild Parsnip.

## **LIFE CYCLE AND GROWTH**

- Wild Parsnip is a biennial meaning it does not flower in its first year of growth. After a plant flowers (normally in its second year) and produces seeds, it dies. When a given plant flowers is determined by the size of the rosette. Plants that reach the critical size by the end of the growing season will flower the following spring.
- Most seeds are dispersed from the parent plant by the end of September and germination occurs from this time through November and again in the spring.
- Wild Parsnip has a long germination period, but the optimum time for germination is in the early spring and that is when most germination is expected to occur. Wild Parsnip seedlings are among the first plants to green-up early in the spring.
- Being able to readily identify Wild Parsnip and early detection of infested areas will minimize inadvertent exposure to this plant and the painful results that follow. Anyone having information on specific locations where this weed is posing a public risk should contact the Counties Noxious & Nuisance Weed Control Office at 613-342-3840 ext. 2413.