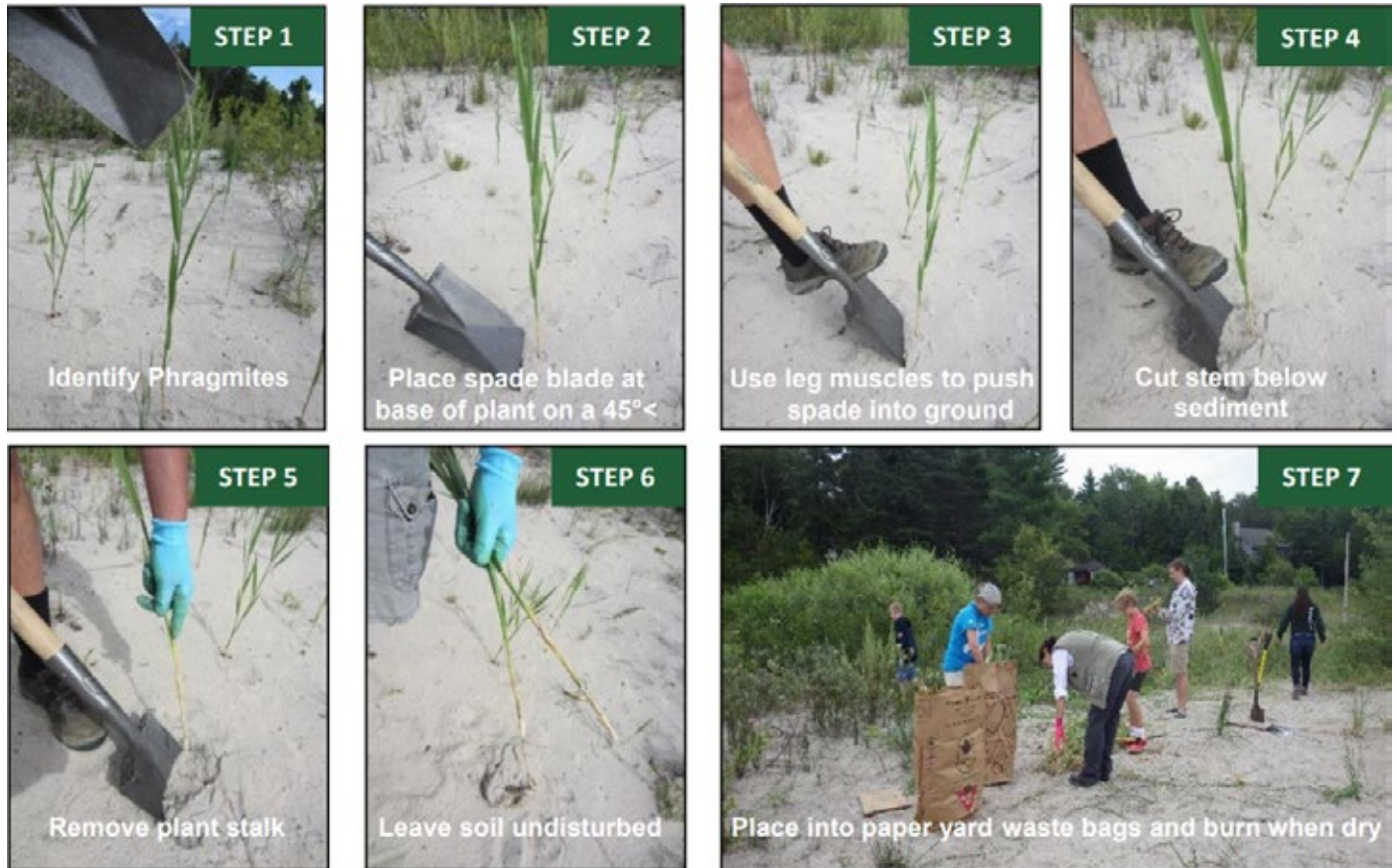


Selective Cutting/Spading on Land



This control method requires manually cutting *Phragmites* stalks to reduce photosynthesis and deprive the belowground structures of energy. Using a sharpened spade or other cutting tool, the *Phragmites* stalk should be cut below the soil surface, where the stalk attaches to the underground rhizome. The photos below illustrates the steps required to remove *Phragmites* using a spade. Selective cutting allows for minimal disturbance of the soil and surrounding species, making it ideal for selective control of *Phragmites* in sensitive habitats. Some have taken to calling this technique “spading”.



Steps for effective spading of *Phragmites* stems on sandy shorelines.

Photo retrieved from the Ontario Phragmites Working Group.

Table 12: Measures and considerations for selective selective cutting/spading on land.

Ideal Site Conditions:	Low-density, small infestations (<300 m ²) along sandy shorelines or where <i>Phragmites</i> is growing in a substrate that can be penetrated by a spade. Effective for selective control of <i>Phragmites</i> in habitats where native and at-risk species exist. This method is ideal for sites with limited access to large machinery/equipment.
Ideal User:	Individuals or groups with the capacity to perform manual labour and with access to cutting tools.
Timing:	During the primary growth stage of <i>Phragmites</i> before seed heads develop. If cutting can only occur once, the best time to cut is when the plant reaches peak height, just as the seed head emerges. If seed heads are present, carefully, use pruners to cut seed heads and then dispose of them into bags prior to applying this cutting technique. Refer to species timing windows (Table 9) to determine when control will minimize impacts to native species.
Method:	Use a sharpened spade to cut <i>Phragmites</i> stems below the soil surface, followed by removing and properly disposing of the stalk, leaving soil and surrounding plants as undisturbed as possible. Refer to the photo above for steps.
Frequency:	Control may be required several times during the growing season as new shoots arise. Cutting more than once in a growing season reduces the density of the stalks.
Efficacy:	Moderate – Can be effective after several years of repeated spading.
Benefits	<ul style="list-style-type: none"> • Accessible method available to property owners, cottage groups, and those managing <i>Phragmites</i> in sensitive habitat. • Promotes native species growth by selectively cutting <i>Phragmites</i> and reducing soil disturbance. • An alternative approach in locations where herbicide cannot be applied. • Cutting the stalk below the soil surface provides a safe walking surface (e.g. on beaches).
Precautions:	<ul style="list-style-type: none"> • Ensure individuals who carry out removal can correctly identify <i>Phragmites</i> at its various growth stages. • Cutting stalks above the soil surface is not effective and can stimulate growth. • This method can be laborious and time-consuming, depending on the infestation size. • If the substrate is hard and rocky, this method may not be applicable. • A long-term commitment to follow-up control is required. • Ensure cut material is disposed of properly as it can re-root and establish new plants.