JAMESTOWN'S INVASIVE PLANTS

A time to Raise Public Awareness, and An Environmental Opportunity for Community Action

Presentation to the Jamestown Town Council June, 2019

WHO WE ARE?

- We are the Jamestown Invasive Plant Public Awareness Campaign:
- A committee operating within the Taylor Point Restoration Association, in cooperation with other Jamestown organizations;
- Focusing on invasive plant infestations throughout our island;
- Committed to promoting community-wide understanding; and
- Promoting effective strategies to address this environmental hazard.

WHY WE ARE HERE

- Many Island residents are unaware of the presence of invasive species in their yards and throughout the Island.
- Many Island residents are unaware of the environmental problems the invasive species pose.
- By raising awareness and providing guidance perhaps we can begin to promote positive community action.

WHAT ARE INVASIVE PLANTS

- Natural ecological balance is a result of eons of parallel evolution of native plant, insect, animal and bird species.
- Non-native plants are not held in check by these established ecological associations that keep the balance of nature.
- Because they are not held in ecological check, invasive plant species outcompete native plants and aggressively overtake them.

WHY IT IS IMPORTANT TO CONTROL INVASIVE SPECIES

- When invasive species overtake an area, they threaten the viability of native plants, birds, insects and animals.
- They displace native plants and reduce ecological diversity, making the ecosystem less resilient.
- They disrupt the ecological, soil, and land conservation functions of the local ecosystem.

WE ARE NOT ALONE IN EXPERIENCING THIS PROBLEM

- In 1999 Presidential Executive Order 13112 established the National Invasive Species Council (NISC).
- EO 13112 seeks to prevent the introduction of invasive species, provide for their control, and minimize the economic, ecological, and human health impacts that they cause.
- US Economic damages caused by invasive species are estimated to be in excess of \$120 Billion (National Council of State Legislatures Website).

INVASIVES AWARENESS AND CONTROL INITIATIVES

- Federal Land Management Agencies
- State and County and Local Governments
- Conservation Organizations
- Cooperative Weed Management Areas
- Academic Institutions

RHODE ISLAND RESOURCES

- RI CRMC
- Rhode Island Wild Plant Society
- RI Invasive Species Council (Natural History Survey)
- RI Natural History Survey
- Rhode Island Woods
- USDA National Invasive Species Information Center

WHICH ARE THE MOST SERIOUS, AND LEAST WELL KNOWN, JAMESTOWN INVASIVE PLANTS

- Japanese Knotweed
- Black Swallowwort
- Porcelain-Berry
- Garlic Mustard
- Japanese Angelica-Tree

WHAT ARE OTHER, MORE RECOGNIZABLE, JAMESTOWN INVASIVES

- Common Reed
 (*Phragmites*)
- Asian Bittersweet
- Multiflora Rose
- European Privet

- Norway Maple
- English Oak
- Autumn Olive
- Morrow's Honeysuckle
- Japanese Honeysuckle

JAPANESE KNOTWEED

INFESTATION ALONG NORTH ROAD



Knotweed also occurs opposite Head's Beach, on Narragansett Ave near Grinnell, at East Ferry, Along Carr Lane, at East and West Passage Estates, and along West Wind Dr.

Japanese Knotweed (Fallopia japonica)

- Knotweed is one of the 100 most invasive species in the world, according to Global Invasive Species Programme.
- Knotweed forms dense monocultures, displacing native species.
- Knotweed can propagate vegetatively. It puts out rhizomes that can extend 65 lateral feet and can grow 3 inches in diameter.
- It grows grows aggressively by these rhizomes and by sprouting from root and stem fragments.

BLACK SWALLOWWORT



Black Swallowwort is ever-present in Jamestown in enormous infestations and can be found at the Library gardens, along Walcott, along Racquet Road, along Potter's Cove, along Rosemary Lane and in the yards and gardens of countless Jamestown properties.

Taylor Point Swallowwort

Black Swallowwort (Cynanchum Iouiseae)

- Black Swallowwort is a member of the milkweed family. Monarch butterflies are known to mistake it for milkweed. The butterflies deposit their eggs on the Swallowwort which is toxic to their larvae.
- A square meter stand of Swallowwort can produce 2000 seeds per year.
- Swallowwort also reproduces via rhizomes.



Black Swallowwort at Taylor Point

PORCELAIN-BERRY



INFESTATION ALONG THE FT WETHERILL ROAD

Huge infestations of Porcelain-Berry occur at Ft. Wetherill, along Racquet Road and East Shore Road, on Beavertail and opposite the lower Taylor Point parking area.

Porcelain-Berry (Ampelopsis glandulosa)

- This highly invasive tendril-bearing vine can climb to heights of more than 20 feet, forming thick mats in tree crowns and shading and displacing native species.
- Its vigorous root system also ensures a competitive edge over local species.
- Birds and mammals eat and thus disperse the seeds.

GARLIC MUSTARD





INFESTATION AT TAYLOR POINT

REMOVING TAYLOR POINT GARLIC MUSTARD

Garlic Mustard occurs along Racquet Road, Blueberry Lane, Ledge Road, Walcott Ave, at Conanicut Battery as well as at Taylor Point.

Garlic Mustard (Alliaria petiolata)

- Flowering Garlic Mustard plants can grow 3 1/2 feet high.
- A single Garlic Mustard plant can produce thousands of seeds. The seeds may remain viable in the soil for up to ten years.
- Garlic Mustard can dominate the understory; monopolizing light, moisture, nutrients, soil, and space and forming dense monocultures.

JAPANESE ANGELICATREE (NOT YET ON THE RI INVASIVE PLANT LIST)



INFESTATION ALONG EAST SHORE ROAD



This invasive occurs along the Helm St. exit, at Watson Farm, along East Shore Road, along North Road across from the reservoir, along West Wind Drive, at Conanicut Battery, and along Ft. Wetherill Rd.

Japanese Angelica Tree (Aralia elata)

- Japanese Angelica Tree grows as high as 40 feet tall, sprouting from root sprouts and forming large dense thickets.
- It also spreads into new areas when birds eat and disperse its small fleshy purple to black berries.
- Its luxuriant foliage shades out the native understory plant.

HOW IMPORTANT IS IT FOR JAMESTOWN RESIDENTS TO LEARN ABOUT INVASIVE SPECIES?

- Enormous areas of our island are rapidly being ravaged by invasive species; in private lands as well as in our parks and along our shorelines.
- The rampant proliferation of invasives is degrading natural habitat and the Island's ecosystems and these species are displacing native species.
- To reverse this dangerous trend, we need to work together as a community.

WITH TOWN SUPPORT, WE ENVISION LEADING THE FOLLOWING KINDS OF ACTIONS

- Compile a list, descriptions and photos of Jamestown's invasive plant species.
- Prepare related pamphlets, posters, articles, and web presentations.
- Map Jamestown's serious infestations.
- Develop guidelines for Town employees regarding the identification and effective management of invasive plants.
- Research and report on other communities' invasive plant control initiatives.
- Lead educational field tours of Jamestown's infestations.
- Coordinate with any Jamestown organizations that may want to promote public awareness in their meetings, workshops, speaker series etc.



We sincerely hope you will endorse this initiative Thank you for your time and consideration.

It will "take a village" to succeed in this endeavor.