

## **GN Invasive Species Annual Report 2023-24 (Prepared by Gerry Ehlert and John Slater)**

Last year's Invasive Species Report provided detailed background information including photos. Our volunteer work is in partnership with the City Departments of Parks and Recreation (Dave Genio, Pat Dirk, Jeff Quinlan) and Environment, Land, and Government Relations (Ken Redden and Adria Coombs) as well as SEAWA; includes active control work, providing awareness, putting on partnership workshops, and testing control methods. GN assists the City in the prevention and control of invasive species in a variety of ways such as finding and reporting to City, and helping with control using hand and mechanical pulling. Also we work with SEAWA on a number of projects including Russian Olive and Hoary Cress (Martha Munz Gue and SEAWA staff). This report does not include GN's Adopt a Pond and Path Program (Martha Munz Gue).

### **A. Invasive Species Volunteer Work 2023**

- 1. Common Buckthorn (*Rhamnus cathartica*) - Prohibited Noxious Invasive.** Following the 2022 work with the City, majority of sprayed trees were dead so orange flags removed, and any live plants were re-flagged and reported for city spraying in 2023. Hand pull of buckthorn ground cover seedlings, and extractorgating of taller seedlings and saplings were continued in Kin Coulee & West Ajax Trail, SE Hill, Connaught Pond, and Police Point Park. We estimate a total of 2050 plants were removed for the City to take to the land fill site. In the fall of 2023, the City had staff and time to spray buckthorn trees at SE Hill, Kin Coulee & West Ajax Trail, and Police Point Park. At MHC pond, no new plants were found in 2023. Periodic monitoring is required. Success is considered a forward progress but much work remaining to be done. We are aware of other areas that may have buckthorn but have not yet had the time to spray, or time to find, report, and hand pull or gatorize. In particular, along the South Saskatchewan River from Ranchlands to Echo Dale Regional Park. Majority of GN buckthorn work has been carried out by John and Gerry, as well as volunteers from time to time, i.e. Grant Mcleod, Bruce Mcleod, and Hazel Gray. Over the past three years, an estimated running total of about 4,100 buckthorn plants have been removed from the City's parks and riparian areas, and thousands of trees have been killed.
- 2. Hound's Tongue (*Cynoglossum officinale*) - Noxious Invasive.** Observed and reported to the City several plants found in PPP. Rob & Corlaine Gardner.
- 3. Black Henbane (*Hyoscyamus niger*) - Noxious Invasive.** No new plants found.
- 4. Dalmatian Toadflax (*Linaria dalmatica*) - Noxious Invasive.** There is a continued need to monitor and control new plants along SE Hill.
- 5. Hoary Cress (*Cardaria draba*) - Prohibited Noxious Invasive.** GN (Martha Munz Gue and Cathy Linowski) and SEAWA continued to pull Hoary Cress in selected areas of the city; particularly Saamis Coulee.
- 6. Yellow Clematis (*Clematis tangutica*) - Noxious Invasive.** Rob and John found several plants in the Connaught Pond area along the golf course boundary fences. Reported to the city.
- 7. Russian Olive (*Elaeagnus angustifolia*) - Non-Regulative Invasive.** SEAWA (Martha Muz Gue) is continuing to work with the City to remove smaller RO in selected areas of the city such as Connaught Pond. The MH College has removed RO from around the MHC pond.

8. **Elcampane (Inula helenium) - GN considers an invasive species.** There were a few more plants found at Connaught Pond which were reported to the city for spraying. Consider Elecampane to be under control with periodic monitoring and reporting as required.

9. **Bittersweet Nightshade (Solanum dulcamara) GN considers an invasive species.** No control work being done on this invasive plant. It is found in infestation patches along the west hillsides of Connaught Pond. Presently, effective control methods are not available. Hand pulling can result in more plants establishing with growth from rhizomes.

10. **Absinthe Wormwood ( Artemisia absinthe)- Non- regulated invasive species.** No work has been done with this species and is found commonly in our Parks along the river and creeks, and disturbed ground.

## **B. Invasive Species Projects (2023/24)**

Projects worked and presently being developed in 2024:

1. **Yellow Clematis Website and Rack Card.** In 2023/24, Gerry is working with Morganne Wall and students at the MHC to develop a website and rack card that would provide awareness about how to differentiate yellow clematis from the native western white clematis. Yellow clematis needs to be controlled and the white clematis not, unless for specific aggressive site reasons.
2. **MHC Russian Olive Task Force.** Dave Genio, Adria Coombs, and Jeff Quinlan met with Cathy and Gerry, and Marilou Montemayor from SEAWA in April 2023 to discuss next steps in dealing with this invasive species. Plans are to develop a City website that would provide awareness information to residents about Russian Olive (RO) i.e. history, problems, and control methods. Our understanding is the City will continue to work on and develop this website. To date, biological control of RO in the City using mites was not pursued. But there are other trial release locations happening in Cypress County, Lethbridge, and B.C. Okanagan that will provide data to apply to RO in CMH.
3. **Environmental Framework - Integrated Pest Management Plan.** GN provided major advice and input to “making this happen”. The IPM is included as a strategy and action in the draft EF plan posted on the City’s website (see page 68 <https://shapeyourcity.medicinehat.ca/environmental-framework>). Note: this program will hopefully deal with animals and diseases in our City such as release of Goldfish and domestic rabbits.
4. **Invasive Species Interpretive Programs** - Working with Alicia Lew, MH Interpretive Program, PPP to put on 2 awareness programs dealing with invasive species Leafy Spurge and Common Buckthorn. Success may support opportunity to put on future events for other invasive species in the City.
5. **Amend Weed Control Regulations and Develop Non-regulated/Aggressive Invasive Plant Guide.** Cathy and Gerry worked on drafting a discussion paper to address the better control of non-regulated invasive species and other aggressive non-native species (i.e. garden plants) into the current weed control regulations and invasive plant identification guide. Species such as RO, German Stalice, Absinthe Wormwood, and Bittersweet Nightshade that are of rising problems and concern in Medicine Hat; however, due to climate and other differences, not at a provincial scale. To draft this paper, several key stakeholders such as AISC, SEAWA, AAFC, Alberta Environment’s Provincial Aquatic Invasive Specialist, and others were consulted. AISC will bring our discussion paper to their members at the March annual conference and with Alberta Agriculture who is conducting a review of the AB Weed Control Regulations. Suggestions include a similar awareness and extension plant

identification guide be developed for non-regulated and aggressive plants. Such a guide would provide the location in the province where these species are considered a problem along with strategies and actions to be taken for their control. Cathy, is presently drafting a list of garden and native aggressive plants to serve as a basis for a “CMH” Non-regulated and Aggressive Invasive Plant Identification Guide”.