

Birds Canada and Metro Vancouver Meeting (May 1, 2023)
Proposed Birds Canada Insect Study

Attendees:

David Bradley (Birds Canada)
Robyn Worcester (MV Parks)
Lea Elliott (MV)
Michelle Candido (MV)

Meeting Outcomes/Actions

- MV supports Birds Canada proposed Insect Sampling Study at Iona.
- MV will need to run this study past Musqueam before moving forward.
- David (Birds Canada) to send a non-technical summary of the proposed study to share with Musqueam and to use in the parks permitting application.
- David (Birds Canada) supportive of conducting a comparative study of insect populations on the sludge lagoons versus the freshwater ponds.
- Once approved, David (Birds Canada) to send weblinks to the traps for Robyn (MV) for purchase.

Birds Canada Insect Sampling Study at Iona

- Birds Canada is proposing a study that involves insect sampling in relation to upgrades that are happening at Iona.
- Birds Canada believes the insect abundance created by the sludge ponds and retention pond is vital to swallows, martin and other aerial insectivores a group of fast-declining birds.
- The proposal is to implement a before and after study, starting now and going through the three initial years of the dewatering process, to track the insect population.
- Microarray stations using the Motus Wildlife Tracking System will help track local bird movements, and timing.
- The proposal is to purchase Malaise Traps to passively collect insects and identify them down to order level.
- Birds Canada is prepared to provide staff to check the station every three days
- Birds Canada has taken part in large ecological studies and wants to apply their experience at a local level.
- The study would need permission to proceed.
- Birds Canada have staff and students they work with that can participate in this study through Federally funded programs

MV led studies and observations

- MV is planning to launch MV led baseline studies on the island including invertebrate sampling
- MV and Birds Canada noted that the baseline study and proposed insect study would be complementary
- Robyn noted during observations over the past two years from September through to June that she couldn't see swallows using the sludge lagoons. They were mainly observed using the park freshwater ponds and intertidal areas.
- In the summer, while doing bat surveys, Robyn noted the majority of bats and swallows were observed around the park freshwater ponds and intertidal areas.
- Robyn suggested a benefit of comparing a freshwater pond and the sludge lagoons

Placement of Microarray Station

- Amy McDonalds (Birds Canada) is suggested to plan how to manage space usage and deal with any related YVR concerns.
- Robyn suggested potential locations for the station, such as the WildResearch banding station, park washroom building, and the end of the jetty.
- Birds Canada to submit a Metro Vancouver regional parks permit application
- Birds Canada to purchase equipment
- The traps and stations need to be placed near the lagoons but outside of the work areas due to work safety concerns.
- The traps and stations should be located in secure locations
- David will buy 2 traps and will share a weblink for the traps
 - Costs for each of these are about \$200 – 300 each, plus tax
- MV to buy a 3rd trap

Ecosystem Restoration in Fraser Delta

- Robyn emphasized the goal of the ecological restoration projects is to restore ecological processes and ecosystems of the Fraser Delta as a whole and does not just focus on birds.
- For example, by changing the north pond from freshwater to tidal, the tidal marshes will benefit chinook salmon and other species important for ecosystem and cultural integrity.
- MV's goal is to restore the ecosystem as a whole and undo some of the damages that were caused in the past. For example, the tree swallow population is high at the site due to the addition of hundreds of boxes. It's not clear if tree swallows are at historically natural levels or whether they may be displacing other species. The project may well result in a net loss of habitat for tree swallows, but perhaps we can find ways to balance that elsewhere on the delta, on other MV lands, etc.