

Aerial Mosquito Program Maps and Images

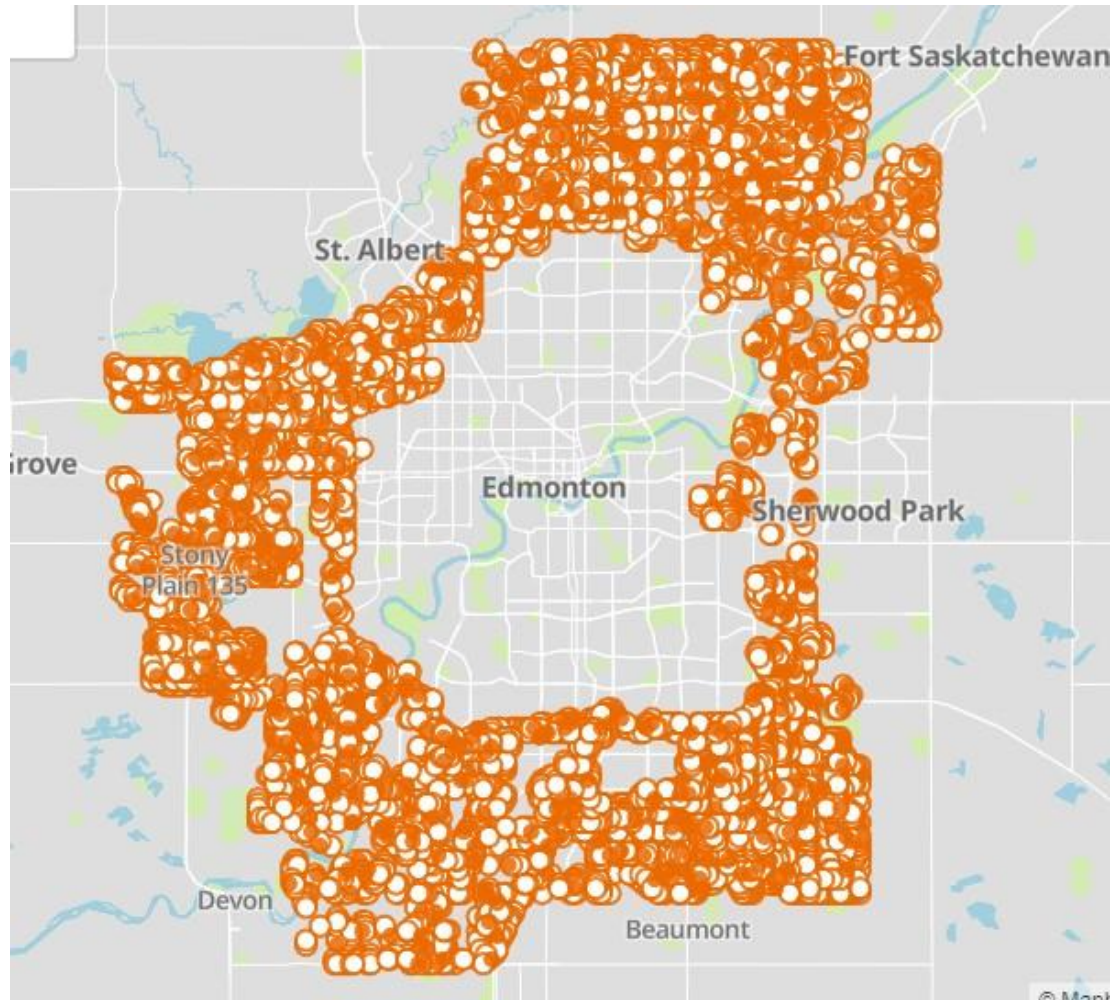


Figure 1: 2020 Aerial Program Treatment Sites.

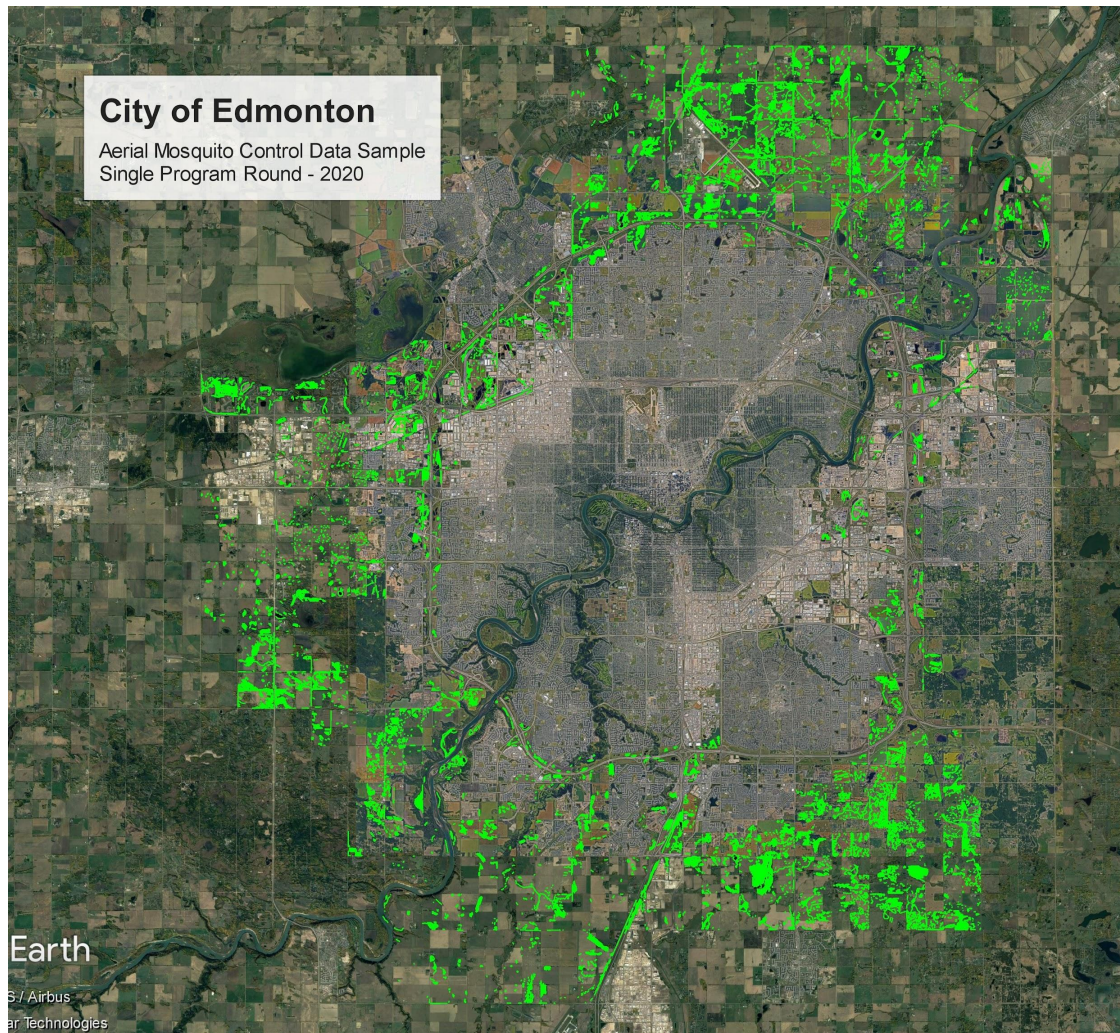


Figure 2: Treatment sites from one round of helicopter larvicide application, 2020.

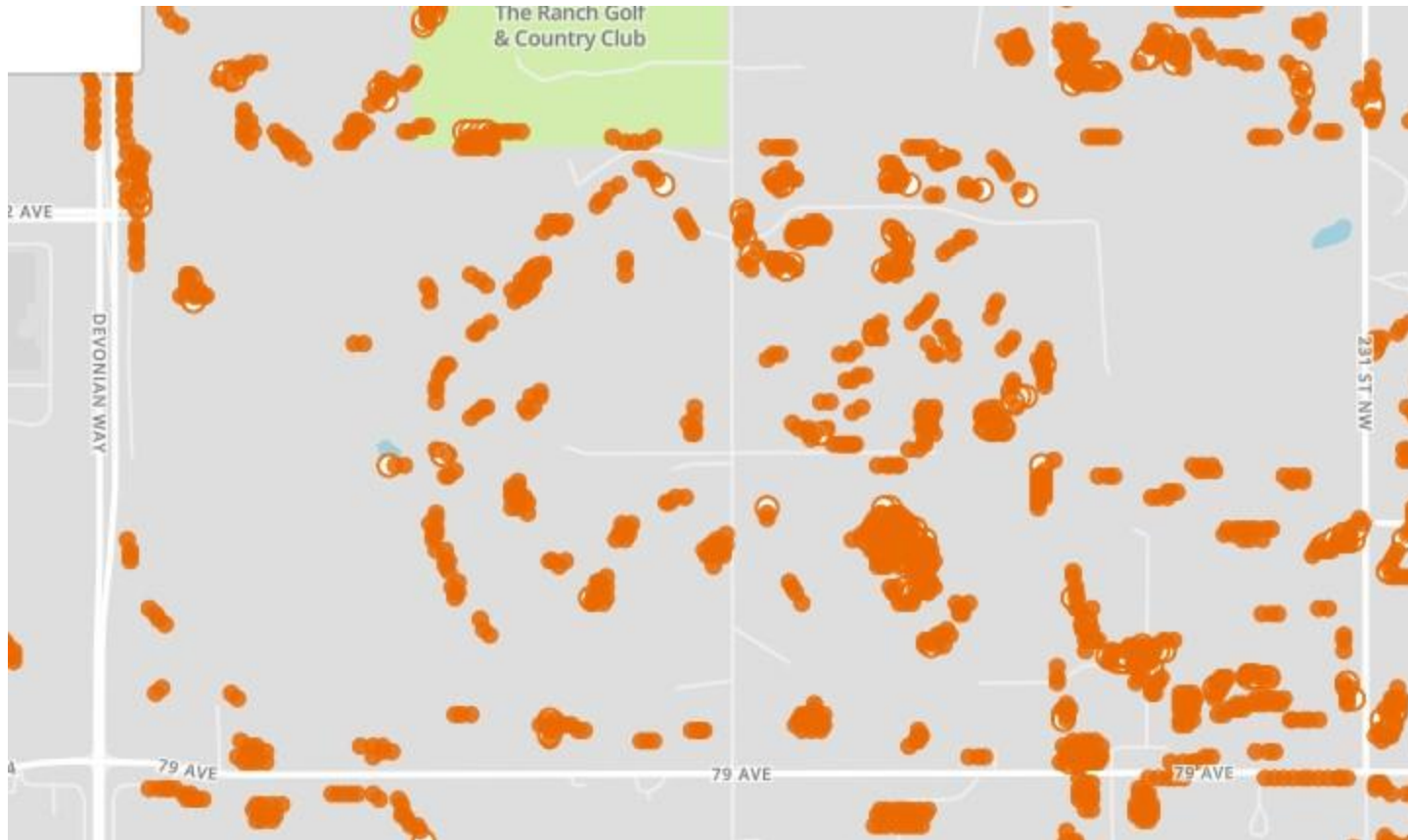


Figure 3: 2020 Aerial Program Treatment Sites - Close up on eight quarter sections in southwest Edmonton.

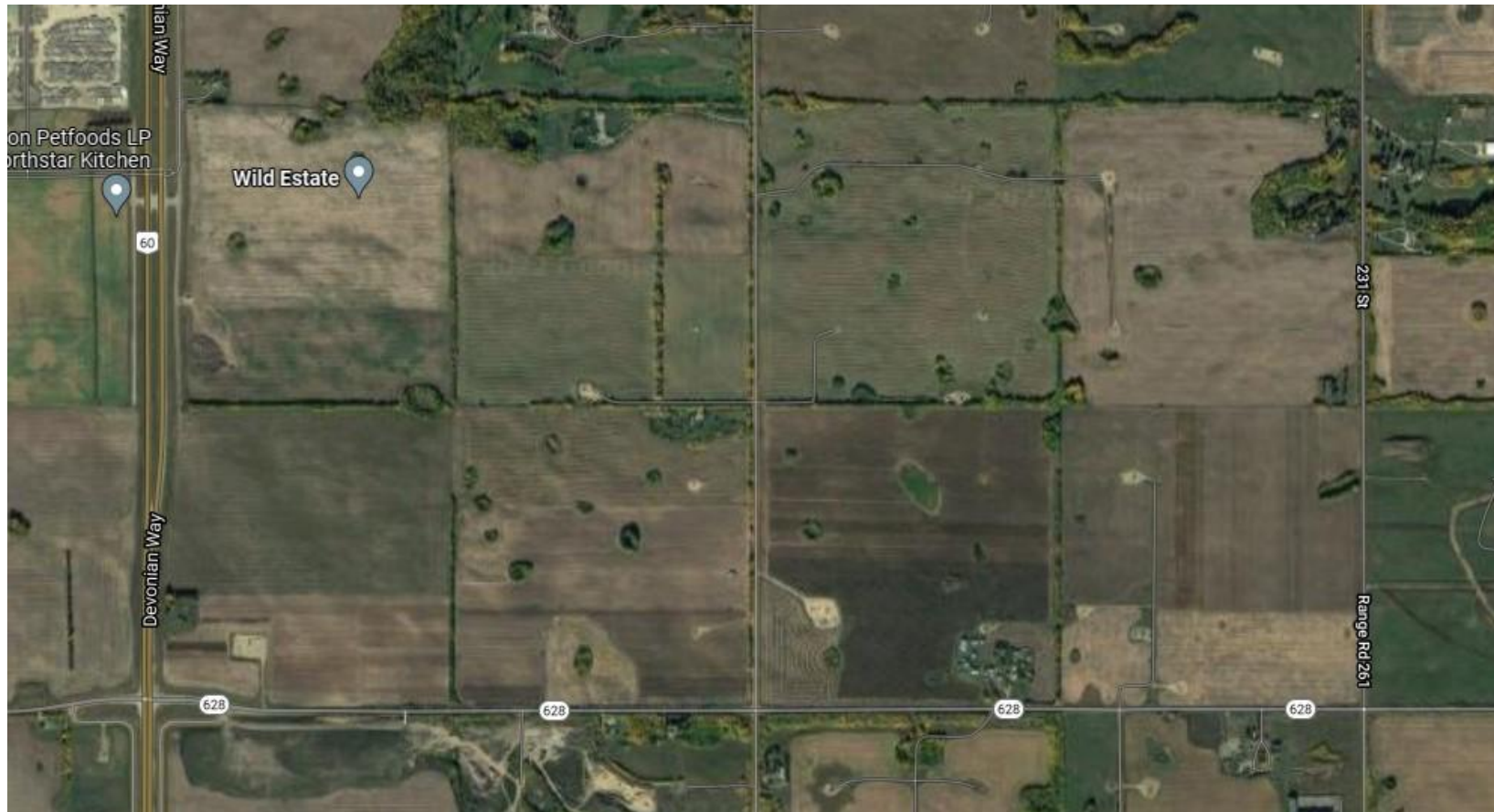


Figure 4: Google Maps satellite imagery of the same treatment area, showing the typical distribution of development ponds.



Figure 5: Satellite imagery of same treatment area, showing overlay of GPS treatment swaths.



Figure 6: Typical mosquito development site in an open field. Even a small pool can support 10-100K larvae per m².



Figure 7: Backpack and roadside ditch applications of mosquito larvicide from ground & ditch programs.



Figure 8: Aerial application of larvicide to a typical mosquito development site.

The product is applied from an altitude of 10-15 meters, specifically targeted at only the temporary pond.

Swath width is approximately 20 meters across.

Product delivered is granular, with the active ingredient impregnated into pellets of ground corn cob, reducing application drift.

Once in the water, feeding mosquito larvae consume the product as they feed on bacteria in the water.

The alkaline stomach of the mosquito larva activates the protein crystals, rupturing their stomach lining and killing the larva.

The product is considered non-toxic to almost all other species, including humans, pets, livestock and birds.

It does affect a few other families of aquatic fly larvae (lake midges, phantom midges), but these are generally not found in high numbers in the same habitat as mosquitoes.



Figure 9: Hiller helicopters (as currently used in the aerial program) sitting on pad, and at typical altitude for application.



Figure 10: Appearance of granular larvicide used in the aerial helicopter mosquito program.