

Mosquito Report TIRRA AGM 26 Mar 2015

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TIRRA

As you know, we have had an increasing mosquito nuisance issue on Thetis particularly properties towards the south end. Many are familiar with the history of the now rusted off flapper on the culvert under Pilkey Point Rd leading to the salt marsh slough plus that the slough and surrounding properties were 'treated' with an unknown chemical.

The following is an overview on the recent site visit, steps taken to date, and what residents can do on their own property

- Note that there is no 'easy' fix, and that we will never get rid of every single mosquito.

Update on the 16th March field visit by Registered Professional Biologist Curtis Fediuk from DG Regan & Assoc accompanied by TIRRA Exec members:

- We attended a number of properties, not enough time to tour all properties on our list.
- Thanks to all for an overwhelming positive response for permission to access and tour, and your desire to see this issue resolved.
- A large amount of our time was spent at the slough, plus private property around the slough and behind. Low lying pasture which included the slow flowing creek winding through properties connected to the slough.
- Multiple larvae samples were collected from hoof prints, puddles, & pools of water from behind or north of the slough.
- Sample identification indicated that all were *Aedes dorsalis* (salt marsh mosquitoes). Shallow water with ample exposure to warm sunshine encouraging larval development.
- No larvae found in actual slough as water temperature still low.
- Also, no larval development found in private ponds during the tour. Deeper water, cooler temperatures plus more shade. *Culex* and *Culiseta* mosquitoes usually develop later in the spring once the weather starts warming up.

Interesting fact : Note that different size & colour of mosquitoes is dependent on how quickly the larvae developed (warm temps) and what minerals were in their habitat. Warmer temperature leads to quicker development leading to smaller sized mosquitoes of the same species.

Short term:

- Flapper on culvert that runs under Pilkey Point Rd is to be replaced by Ministry of Transportation. Results will be monitored, salt water flow, high tides, slough drainage, and valley drainage behind. The intent of the flapper is to reduce the amount of salt water flowing into the slough and hopefully reduce the habitat for salt marsh mosquitoes.

What residents can do around their property as outside temperatures begin to warm up.

- Any standing water is potential habitat. Including ponds, ditches, old tires, tarps., gutters, bird baths, anything that can hold water.
- If possible remove any and all standing water.
- Screen and/or cover any water storage.
- Reduce growth from edges and sides of ponds, trim ditches. fill in any ditch or pond that is not needed.
- CVRD pamphlets available from TIRRA.
- Larviciding: VectoBac is a bacterial larvicide. Made with Bacterium Bacillus Thuringiensis or BTI which targets the mosquito larvae once ingested. Similar to BTK used on fruit trees. It has no residual activity, does not bio-accumulate and has no impact on beneficial organisms.
- Mosquito pucks containing Bti are sold at Buckerfields, Top Shelf Feeds in Duncan or similar stores. Each puck will treat up to 100sq ft and last up to a month.
- VectoBac 5kg bags for larger ponds can be purchased through DG Regan & Assoc.

Long term:

- There is no longer any provincial funding provided for mosquito West Nile Virus surveillance or control in BC. Even though there are other potential issues - lack of exercise, use of Deet, small children.
- Proactively develop a PMP (Pest Management Plan) following the Integrated Pest Management Act from the BC Ministry of Environment.

- Public education and information is provided through personal contact, public meetings.
- A development site survey is developed to identify potential habitats, site mapping, larval and adult mosquito sampling.
- This information is essential to prepare and submit a Pest Management Plan to the Ministry of Environment.
- Once approved by the Ministry of Environment, a PMP would be valid for 5 years.
- Note that a PMP can take one to two years for final approval. The intent to move forward now with initiating a PMP, is a proactive move, good for 5 years once approved, and in the event that the flapper is not effective and/or the nuisance mosquito issue does not resolve or in fact multiplies.