

Watershed Science Tour

October 3rd, 2013



Many of our basin residents are unaware of the vast amount and diversity of research currently being conducted in the Oldman River Watershed. That's why the OWC's Watershed Science Team (WST) feels it is important to offer people the opportunity to see some of these projects first hand by getting out in the field where all the action happens.

We had a full bus of 50 people come out to travel around this unique and complex basin of ours. This year the Team decided to focus on sites closer to Lethbridge, starting the day off at the newly opened Lethbridge Biogas/Cogeneration Plant – what an extraordinary site, generating electrical and thermal energy through the anaerobic digestion of organics such as liquid manure, food processing wastes and even animal carcass materials – and believe it or not, the place didn't stink – now that's impressive!

From there we travelled east of Lethbridge and visited a couple feedlots to learn what steps the owner/operators are taking to reduce the impacts they're having on our watershed. Providing buffers to reduce runoff, installing off-stream watering units for livestock and even converting manure into animal bedding were just a few of the initiatives being taken on by these local farmers. Thank you to Leighton Kolk and Garrett Haarman for welcoming us to your farms!

The Picture Butte Golf Club warmed us up with a fantastic lunch! Afterwards Alice Hontela from the University of Lethbridge presented "Pharmaceuticals in our waters" - what we hope people took away from her talk was to really think about what products we are using in our everyday lives and how they can have an impact on our aquatic ecosystems – a very thought-provoking subject!

Two of the OWC Teams (Urban and Science) have joined forces with the City of Lethbridge, Lethbridge College and Agriculture and Agri-Food Canada, to take a closer look at the quality of Lethbridge stormwater. We hiked to one of several stormwater outfalls to discuss the fact that the city's stormwater isn't treated before it enters the Oldman River and therefore it is so important our stormwater is not exposed to contaminants. They are currently two thirds of the way through a three year study examining stormwater quality. Once complete, this new data will be compared to a stormwater quality study conducted 10 years ago to look at the effects fertilizer, pesticides and other chemicals have as they flow into the river via stormdrains.

A tour through the Lethbridge College Aquaculture Centre and Aquaponics green house gave us a look at a truly efficient and ultra-organic process of growing food! Grass carp are reared in the Aquaculture Centre to later be stocked into water bodies and act as a long term form of biological vegetation control. The water from the carp tanks is full of nutrients and rather than have that natural fertilizer literally go down the drain, it is piped over to the Aquaponics greenhouse. This nutrient-rich water is then circulated through the greenhouse where the plants utilize this it to their fullest!

The last stop of the day took us out to Alberta Agriculture's Demonstration and Research Canal. It was amazing to see all the science behind irrigating our fields! And to have all the various equipment and methods in one central location was an extremely effective way to demonstrate how far we've come and to really see how technology is improving the way we grow our food!