Friends of the Oxbows (FOTO)

NEWSLETTER

Issue No. 21 Winter 2021

THE FOREST on OKANAGAN AVE. W.

By Allan Garland & Randy Manuel

Once again, in mid-January 2021, recent campers were evicted by the RCMP from the forest on Okanagan Avenue West and their personal effects removed by the Friends of the Oxbows and some well-meaning residents of Chatham Street. This situation of campers, evictions, and related events has become a revolving cycle in this once heavily forested and well watered area, known historically as the Okanagan River Whirlpool where, in the 19th Century, pioneer Thomas Ellis once fell from his horse and almost drowned. People who live nearby or routinely walk through or around this forest are asking if something can be done to protect what remains of the trees and shrubs of the forest and its wildlife from campers, drug users, and people who would raid and steal from the nearby commercial establishments like Inland Equipment Sales, and Leisureland RV Centre. The Penticton Indian Band (PIB) also has an interest in this forested area. Some PIB elders are known to hold ceremonies there, to honour deceased members who may have lived and been buried in this forest. Indeed, a box of human remains was once stored at the Penticton Museum*, which dated from the time of the former curator Reg Atkinson and is thought to have originated in this particular area. And, anyone with an interest in wildflowers knows that this is one of the few remaining places in Penticton where examples of native asters and local butterflies can be found, including the magnificent Two-tailed Swallowtail (see following photo). Also, people who caretake and steward the Ellis Creek Basin know that deer, birds, raccoons, bears, coyotes, beavers, and muskrats do not distinguish between these two areas, which are a connected food resource and refuge not only for these animals but also for the endangered Western Painted Turtle, now found abundantly in the Warren Avenue Oxbow (see article by Rick McKelvey, this issue). As Penticton continues to grow, it is becoming quite apparent that some sort of behavioural change on our part is going to be required, in order to protect the Forest on Okanagan Avenue West.

(*Note: Human remains are no longer held in the museum. These were returned over 30 years ago. Human remains have been found along many sections of the old river decades ago. I suspect there will in the future be some that are discovered in future building projects, roads, or house construction. R. Manuel)

Two-tailed Swallowtail on Milkweed – photo by B. Anderson (enhanced by T. Friesen).

OXBOW SILTING CONTINUES

By Bob Anderson

Prior to completion of the excavation of the Channel in 1953, much of the silt and sand that was washed into the Okanagan River was dredged out to allow river traffic. Some of it, as it flowed through Penticton was washed into Skaha Lake. With the opening of the Okanagan River Channel in 1957, the oxbows were cut off from the river flow and water no longer flowed through them. However, gravel, sand and silt continued to flow into the oxbows through the storm sewers, gradually filling them up.

The situation at the Brandon Avenue oxbow has been amplified with a major storm sewer outlet draining in to it substantially adding to the accumulation. The City of Penticton removed sediment from that oxbow in the mid 70's, in the early 80's and again in September 2016.

Prior to the most recent cleanout of the Brandon Avenue oxbow a gravel interceptor was installed in the storm sewer line flowing into that oxbow. Interceptors were also installed at the south end of the Kinney Avenue oxbow as well on other locations in the city. The Brandon Avenue interceptor seems to be effective in collecting gravel, but silt is still coming into that oxbow. In 2017 the Friends of the Oxbows placed several measuring rods in the Brandon Avenue oxbow to estimate how much silt was accumulating per year. At the Brandon Avenue sewer outfall, an additional six inches accumulated in just one year. As the water on the Brandon Avenue oxbow is only about three feet deep, that rate of siltation would indicate that the oxbow will require dredging within six or seven years. Presumably silting is occurring in some measure on all the Penticton oxbows depending on the storm sewer volume on that oxbow.

With the growth of population in Penticton and the constructions of homes and other buildings to accommodate that increase, the ground is being disturbed more rapidly, thus loosening the silt ever more. Silt is then being washed in to the storm sewers. A solution would be to have settling ponds at each sewer outfall such as the one at the end of Ellis Creek. Since there is a lack of land for this task the alternative we suggest is for the City of Penticton to begin a regular dredging of all the oxbows bordering along the City limits.

As owners of land adjoining one of the City's oxbows we suggest that you bring this concern to the Mayor's attention. He can be reached by phone at 250-490-2400, by mail at 171 Main Street,
Penticton, BC, V2A 5A9 and by email at john.vassilaki@penticton.ca The alternative is the Penticton oxbows will fill in and the birds and mammals that you once enjoyed viewing will no longer remain.

Penticton Brandon Avenue Silt Accumulation Record

Oct. 20/18 **post #1** (closest to storm sewer outlet) 33" + 12" = 45" to top of pole.
Nov. 2/19 post #1 - 27" + 12" = 39" T.O.P.
Nov. 14/20 post #1 – 16" + 12" = 28" T.O.P.

Oct. 20/18 **post #2** (furthest from storm sewer outlet) 29" + 12" = 41" to top of pole.
Nov. 2/19 post #2 - 24.5 + 12" = 36.5" T.O.P.
Nov. 14/20 Post #2 - 21" + 12 = 33" T.O.P.

Oct. 20/18 **post #3** (across from wharf) 29.5 + 12" = 41.5"to top of pole
Nov.2/19 post #3 - 27" + 12" = 39" T.O.P.
Nov. 14/20 post #3 – 34 + 12 = 46"

Notes: T.O.P. Top of pole. These are steel fence poles. The measuring stick we use is what us old timers called a yard stick. Since the yard stick wasn't long enough, we placed it 12" above the bottom of the measuring pole. The measuring pole has a swing-out arm at its base to assure accuracy.

Safety cones are attached to the top of each post to warn skaters of its presence.

WATER QUALITY on the Oxbows

By Rick McKelvey

This year marked the fifth year simple water quality tests were conducted on the Penticton oxbows and adjacent waters. All water samples were collected by B. Anderson. As in the past we measured temperature, pH, conductivity, salinity, total dissolved solids, and turbidity. Temperature, as might be expected in small, enclosed

waterbodies like the oxbows, fluctuated seasonally, from 0° C to as high as 25° C, in concert with the annual climate. pH tended to start slightly basic early in the year, and declined to more neutral levels towards fall, which seems to be the normal annual cycle. Conductivity, salinity, and total dissolved solids, all general measurements of what the water in the oxbows has dissolved in it, are indicators of how safe the water is for aquatic organisms. High levels of ions in the water (broadly what is measured by those three parameters) may be toxic to certain organism and may therefore limit biodiversity and productivity. The waters in our oxbows continued to show levels of those parameters consistent with relatively unpolluted waters. Sudden changes in those levels would be a cause for concern and could indicate some type of pollution event. The only sudden changes noted this year (and in previous years) followed snow events, when it appears more salts wash into the Brandon Avenue oxbow in particular. Turbidity of the oxbow waters was slightly lower this year than it had been in previous years. As turbidity affects the ability of light to penetrate the water column, and thus influences productivity, it is one of the most important factors in assessing water quality.

BIRD & TURTLE surveys on the OXBOWS

By Rick McKelvey

Bird and turtle use of the oxbows was measured for the sixth year in 2020. Surveys were conducted by A. Garland, A. Bodden and R. McKelvey on all oxbows south of and including Ellis Creek on the east side of the Okanagan River Channel. The total number of bird species seen this year was 90, which was up considerably from the previous high, seen last year, of 76. This also included the sighting of the endangered Yellow-breasted Chat, which is a first for the oxbows on the east side of the Okanagan River Channel. The total number of birds seen per survey was quite variable and appeared to be slightly lower than the total numbers seen in 2019. Total numbers were somewhat higher per survey than in surveys prior to 2019, however. Surveys were conducted in May and June on a weekly basis to determine if simple monthly counts accounted for variance between counts adequately. Means counts for May and June this year were within the range of single monthly counts seen in previous years for those months, so it appears single counts per month are representative of the numbers actually there. Rates of use of the oxbows remained variable between the oxbows, but was more or less consistent with rates seen in previous years. Some oxbows appear to be used by birds disproportionately to the size of those oxbows. This may have to do with the variable nature of the quality of the habitat between the oxbows, and to the levels of disturbance apparent on some of them. Some oxbows must appear "safer" to birds than others, so they get more use.

Turtle counts in 2020 were the highest yet seen. We had thought previously based on average counts of turtles that the population for all the oxbows was somewhere around 60 animals. The peak count this year was 156, about 2.5 times the previous high count of 63 0n 2017. As the turtles ranged in size from obviously new recruits to the population to large and mature, we don't believe the high numbers seen in 2020 were due to population increases, just to increased observability. We may attempt to record turtles by size class in future surveys, which will give some indication of recruitment rates, hopefully.

Our Website http://pentictonoxbows.ca/
is generously sponsored by:

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Male & Female Wood Duck – Rick McKelvey

Male & Female Mallard – Rick McKelvey

FACT SHEET: k'əmcnitkʷ Floodplain Re-engagement
Winter 2020-21 Enhancement Construction Works

Construction Timeline:

Stage 3 (upcoming): Winter 2020-21, adjust floodplain elevation, install habitat cobble-gravel, cover features, and soils for plantings (i.e. the "habitat jewelry"). Exact dates to be determined.

Stage 2 (complete): September 2020, re-connect to river via fish-friendly culvert.

Stage 1 (complete): March 2020, excavate and re-contour ~8800 m^2 of the floodplain.

Project Steering Committee

- Penticton Indian Band
- En'owkin Centre
- Okanagan Nation Alliance

Advisory Committee

- Environment & Climate Change Canada
- Department Fisheries & Oceans Canada
- BC Ministry of Forests, Lands, Natural Resource Operations & Rural Development
- South Okanagan Similkameen Conservation Program
- City of Penticton
- University of British Columbia
- Newbury Hydraulics
- Friends of the Oxbows
- Okanagan Basin Water Board – Wetland Strategy

Key Messages

- q̓awsitkʷ (Okanagan River) channelization isolated the river from its floodplains and resulted in the loss of 50 % river length, and 93 % riparian habitat. Channelization also lowered the water table by ~3 m in the Penticton Channel portion.
- This project re-engages ~8800 m2 of historical floodplain and riparian area for Chinook salmon, and multiple other culturally significant species and species at risk.
- This project enacts the shared Syilx (Okanagan People's) vision, and guidance from the late Chief Albert Saddleman and Elders, to bring back the fish, put back the river, and put back the people.
- The main excavation and culvert installation works were conducted in March and September 2020; however, there are remaining construction works required when the floodplain is completely frozen.

This is a sensitive habitat area; please remain on the channel walkway and keep dogs out of the culvert and floodplain.

Now that restoration construction is complete, the K'əmcnitkʷ ("Alongside the Water") Floodplain Re-engagement Project is ready for planting as soon as the warm weather returns through to June 2021 (following COVID-19 prevention measures of course).
A request for volunteers will be sent out soon