THE NETLEY-LIBAU MARSH - AN ENTIRE ECOSYSTEM IN UPHEAVAL

By: Charlie McPherson, N-L Marsh Caretaker, Whytewold, MB.

Although Lake Winnipeg Regulation (LWR) is required by law and can get kudos for it's ability to drain off Lake Winnipeg's (L. Wpg.) excess water levels, those exceeding 715' above sea level (asl), thus saving cottagers, towns and RM's around the lake from flooding, it can't get any for the **sustained flooding** that it inflicts upon all ditches, creeks, rivers and marshes within it's reach, especially in the dryer years.

LWR guarantees the utility enough water (711'-715') will **remain** in the lake for power production in almost all years. Hydro says that LWR has **altered** the annual water pattern by **storing** the water in the lake, using the lake as a reservoir now for winter power production. Fall water levels within LWR are now higher in the fall and lower in the spring - a 38 year reverse of the natural. While slowing the flow out of the lake and storing the water, the slowed flow is supplemented by the Churchill River Diversion to feed the generating stations along the Nelson River for summer power production. Perhaps Lake Manitoba and Lake Winnipegosis would serve as rervoirs (depending on watershed inflows) as well since their waters have to flow through Jenpeg too.

Beaver may dam up a watershed but they don't tear their dams down in the winter to freeze themselves out and kill their loved ones and their friends and neighbors downstream. But Manitoba Hydro does. The reverse of the natural has been disastrous! But it's not just Manitoba Hydro's fault. The Province makes billions off of its water rentals to the utility, it's PST taxes on electricity sales, it's land taxes, it's loans to Hydro etc... And Canada has made billions too. All three are bedfellows in LWR and the CRD and it's all about profit margins.

Both LWR and the CRD are failed development plans when it comes to the environment. Again, it's the devastating effects of the, " REVERSE OF THE NATURAL!" Bird declines within the marsh have been DRASTIC! 80%, 90% and 100%. Same for bugs, frogs, muskrat and beaver, as well as for vegetation. The creeks, channels and rivers within the marsh are devoid of mud and are expanding at alarming rates. They are devoid of dabbling and diving water birds, herons, grebes and shorebirds too. Most stately Sand Willows have been blown over. Sustained water levels saturate the riparian edges, the trees canopy out (leaf out) and act like parachutes and summer wind storms blow them over. Depending on wind tides and spring thaw, they'll end up lodged within the marsh or lodged on the submerged sand bars a half a mile out into the lake. Most all the Manitoba Maples in the marsh drowned in the winter of 2011 and 2012. They went into freeze up submerged that year. Was it because of the watershed inflows or was it because of backed up water levels in 2010, the year of the weatherbomb, the year the generators at Jenpeg were shut down for retooling? Or perhaps a bit of both?

The 1850's geographer, Hind, described the waves rolling over Lake Winnipeg's sand bars along its south shore as a **THUNDEROUS ROAR!** He also described the sand bars as being

a series of bars with marshes in between extending hundreds of yards out into the lake. Hind was on the beach ridge separating the Netley-Libau Marsh from Lake Winnipeg in October, perhaps a drought year, perhaps not, when he penned those words. One thing is certain, LWR was not in place and the lake would have drained naturally that year. Hundreds of yards of sandbars would be a lot of sand bars and a lot of clams - which are gone now. A Manitoba Hydro chart showing lake expansion from the 1870's to the present shows shorelines as having expanded anywhere from about 50' to approximately 800' in some places. Draining the watershed for agriculture for the past several hundred years has filled the lake to overflowing. Hence the call in the mid 1960's for LWR.

For Fun: While travelling north from the marsh along the west shore of L. Wpg., Hind records that he and his crew came across a conjuring First Nation's fella with wife and child travelling south. After exchanging gifts, the First Nation's fella said he'd conjure a wind in Hind's favor. "That would be averse to your journey," spoke one of Hind's crew. "Ah," said the fella, "but I'll conjure two winds for me!"

The Netley- Libau Marsh is Canada's Important Bird Area (IBA) 009. 11,000 IBA sites in over 200 countries have been identified world wide. It was felt that if something wasn't done to save the world's birds, the world would lose it's birds. Canada has nearly 600 IBAs. Manitoba has 38. Lake Winnipeg has 8. All 8 are affected by LWR. For the scientists, IBA sites are identified using rigorous, scientific criteria. For the birds, IBA sites are literally the most important places on earth.

The Netley-Libau Marsh is an important migratory corridor for many birds. They'll travel north down the Red River, through the center of the marsh and swing either east or west once they reach the beach ridge separating the marsh from L. Wpg. to follow the lakeshores to their breeding destinations in the north. Some will stay and breed in and around the marsh. On Mother's Day, 2012, I drove to the south west corner of the lake to see if I could see any shorebirds dabbling in the mud at the end of Warner Rd. Was I ever in for a surprise! Hundreds of flocks of 10s, 20s, 30s, 40s, hundreds and more flew by, and with them, hundreds and hundreds of Baltimore Oriole, Rose- breasted Grosbeack, Warbler, Sparrow, Kingbird, Swallow, Crow, and to a lesser extent, Flicker, Blue Jay and Sharp-shinned Hawk - some hawks zooming by within a few feet of me and the ground. And hundreds and thousands of Grackle, Blackbird, Pelican, Cormorant, ducks and geese, grebe and merganser as well. T'was a migration freight train to behold indeed. I spent 3 hours watching it and, prior to me getting there, for many species the migration had been going on through the night. I called Audubon (a highly noted bird conservation group) and asked about night migrations. They said that many of the birds leaving the Mexican, Yucatan Peninsula, for example, will migrate the 18 hour flight across the Gulf of Mexico to the US Mainland, through the night, and if they have the reserves to keep going, they'll continue on into the day as they did for me over the beach ridge at Warner Rd.

THE BIRDS:

Other than the marsh serving as an important bird migratory corridor,
Netley-Libau Marsh is best known for its tremendous concentrations of southward-migrating birds. Numbers of geese and ducks on some occasions exceed 100,000 during fall migration. A

little earlier in the year, at least 25,000 moulting ducks are found in the area. Red-winged and Yellow-headed blackbirds congregate here in late autumn in numbers exceeding 100,000. As well, at the beginning of the fall migration in August, swallows are found here in the thousands. In addition to the numerous species that stopover at the site during fall migration, several bird species breed at this site in significant numbers. Franklins Gulls nest in large colonies within the marsh, in numbers exceeding 4,500 pairs. This represents at least 1.3% of the North American population, based on upper level population estimates. In the late 1970s, 325 Forsters Tern nests were recorded in the marsh (about 1.5% of the global population). In addition, over 100 pairs of Black-crowned Night-Herons have been observed nesting in the marsh, which account for 2% of the estimated national population. Species that breed in large, though not significant numbers at the site include the Eared Grebe (100+ pairs) and the Western Grebe (125+ pairs). At least twelve species of ducks breed here mostly dabbling ducks.

On the days that I accessed the west shore of the marsh during peak migration in the fall of 2012, ducks and geese numbered less than **5000.** The Netley-Libau Marsh is a hunted marsh although rarely anymore. Like I've said, there's no mud/no habitat. The N-L marsh is a lake. It only takes a few good hunters who know what they are doing to shoot out a marsh. And if they get shot at while feeding in the surrounding farm fields too, they'll simply go to Oak Hammock marsh or the City of Wpg. where they won't get shot at.

Red winged Blackbird: **2012** < 3000 **(FM)** Fall Migration
Yellow-headed Blackbird: **2012** < 60 **(SB)** Summer Breeding

Molting Mallards and Wood Duck: **2014** < 100 **(SB)** (2014 has been an extremely high watershed inflow year and nary a duck was to be found. Again, the marsh is a lake.

Barn Swallow: **2012** FM <300
Bank Swallow: **2012** SB 200
Bank Swallow: **2013-2014** SB 0 (a Lake Wpg. windstorm in the fall of 2013 destroyed their one and only nesting, beach ridge sand dune.)
Tree Swallow **2012** SB <200
Cliff Swallow **2012** FM <200 2014 0

Eared Grebe: **2012-2014** SB 0

Western Grebe: **2014** SB <40 I (individuals)

Franklin Gull: **1999** 9,000 I BR 5000
2012 SB 800 I
2014 SB **(I didn't see any, two day trips. I suspect the June storm wiped out the nests.)**

Black-crowned Night Heron: **1995** SB 100 P (pair)
2012 SB 1 P

Forster's Tern: **1970's** SB 325 N (nests)
2014 SB < 20 N

Other Species: SB 2012 (note: SB)

3 pair Bald Eagle raised 5 juveniles in 2012.
Great-blue Heron: <20
Coot < 200
Blue-winged Teal 200
Redhead 4
Cormorant (non breeders) 200
Pelican (non breeders) 200
Great Egret (rare) 8 (probably flew in to feed)
Green Heron (rare and late summer breeding) 2

Crown land birds: Warbler, Great-crested Flycatcher, Red-headed Woodpecker, Flycatchers, Sparrows, Kingbirds

NORTHERN FLOOD AGREEMENT:

LWR and the CRD affect the First Nations' people living within their reach. A Northern Flood Agreement to the tune of $1 billion+ has been hammered out to provide land for land, water regimes mitigation, infrastructure and other compensations etc...

A SOUTHERN FLOOD AGREEMENT FOR N-L MARSH:

1. Stopping the REVERSE OF THE NATURAL within LWR and living with what the watershed provides would end the environmental devastation. STOP THE REVERSE OF THE NATURAL Mr. Macintosh. LWR is a failed development plan. It got away with 38 years of degradation less some of the wet years when the marsh would have gone into freeze up flooded. But a marsh needs that to kill it off. And it needs drawdowns to restore itself. N-L can't get the drawdowns with LWR. Hydro is getting globally significant awards for its 'Green Energy Smarts' but it's coming at the cost of a Globally Significant Important Bird Area. Now's the time to fix it before granting Hydro its Final License. Remember, the Province has blood on its hands too, more than Hydro does, as does the Fed. The N-L marsh used to support 40,000 - 240,000 muskrat, depending on the year. I made 29 trips into the marsh in 2012. I found one muskrat and Diesel, Tammy's neighbor's dog, got it. Tammy lives on the beach ridge separating the lake from the marsh. I found one frog too, and it was DEAD. Perhaps the Black-crowned Night Heron got it. Write a Southern Flood Agreement into that license Mr. MacIntosh.
Manitoba became the first in Canada to pass legislation (2013) to restore entire ecosystems. Start with N-L please!

2. Hydro states that the annual seasonal water patterns have pretty much remained the same throughout LWR and that's partly true (higher in the spring and summer from watershed inflows and lower in the fall and winter. But again, the storing of the water and the dumping of it within the seasonal changes isn't what a beaver is going to do. Hydro also says that it hasn't really been determined that LWR is the cause of N-L marsh deterioration, that there are other factors involved. Some of that is true too, but stop the #1 cause of marsh deterioration (reverse of the natural) and the marsh would come back, especially in the drought years. The drought of 2003 brought back a half mile ring of cattails around the N-L Marsh perimeter plus whatever grew outward from around the shores of the flooded marsh lakes (about 17) within. The spring low on Hydro's mean water levels' chart shows 711.5' asl. A fall reading would have been 712.5' if one ft. of water was drawn off the lake that winter. The generators at Jenpeg at Mac. gen. can do that. A 1934 map of the marsh, a drought year prior to LWR, shows a reading of 710.5' asl. Marsh habitat and birds abounded. And so did the muskrats and frogs. Had LWR **not been in place**, the N-L marsh could have reached 710.5' in 2003.

3. An annual marsh budget: You three: Canada, the Province and MB. Hydro broke it. You three can fix it. You've made billions for a billion things. Make N-L one of the things.

4. Diking and dams: $10,000,000 and $9,000,000 (1970's) respectively were thrown at Kiskitto Lake in front of the dam at Jenpeg and Cross Lake below the dam at Jenpeg to restore their water regimes. Kiskitto got about 14 km. of diking and a 15m dam, plus some other mitigation **TO KEEP LWR OUT.** The Netley Libau Marsh would nee the same: dikes and dams to **KEEP LAKE WINNIPEG REGULATION OUT.** Better, yet, stop the reversal.

5. A hunting ban.

6. No boats within sensitive nesting areas during the breeding season.

7. No cutting in the Crown Land.

8. A paid marsh Champion.

9. **"KEEP DEISEL OUT!"**