

MANAWATU ESTUARY TRUST



Newsletter

October 2010

Coming up for your Trust is the Annual General Meeting, as well as the New Year Fair. Below you will find details, and also reports on past activities.

Annual General Meeting

The Annual General Meeting for this year will be held in the Holben Pavilion on Saturday 27 November, at 2pm. The Agenda is:

Annual reports

Accounts

Elections for officers for the Board.

Speaker - Jesse Conklin (see below)

Afternoon tea . Note that this year, it is a BYO feast again; those with birthdays in Jan-June are asked to bring a contribution. Tea, OJ and coffee will be supplied at the Pavilion.

In the revised constitution (now posted on the Charities Commission website - check it out!) we revised the rules so that not all the Board changes at once. So this year, considering resignations, we have four. positions coming up for election this year. The Board members rolling over are:

Joan Leckie (Vice-Chair)

Phil Battley

Christina Paton

Teresa Thorn (Treasurer)

Kelvin Lane

Roger Slack

The Chair, Jill Rapson, was elected for a one year term. Resignations have been received from Mark Zarembo (who was secretary) and Charlotte Minson (who is finishing writing up her PhD). The vacant positions are therefore for Chair, Secretary and a Board Member.

Nominations so far received are:

Nominee	Position	Nominator	Seconder
Jill Rapson	Chair	C. Paton	J. Leckie
William Demchick	Secretary	J Rapson	C. Paton
	Others?		

Further nominations should be forwarded to malimidwe@paradise.net.nz . Also late nominations can be accepted at the meeting.

AGM speaker

The speaker this year is Jesse Conklin. His topic is "Life story of the Godwits: migration, mating, monitoring and the Manawatu Estuary".



Jesse carrying two inflatable cranes across the Alaskan tundra, to reassure the local godwits. (They weren't impressed!)
Image: Murray Potter

For the last three years, the Manawatu Estuary's own Bar-tailed Godwits have participated in a ground-breaking study focusing on how they fit such an epic migration into their busy annual schedules. Massey University PhD student Jesse Conklin used tiny dataloggers to track local godwits to their breeding grounds, showing that our close-knit flock spreads out over vast areas of coastal Alaskan tundra during the breeding season, only to reunite each year upon their unerring return to Foxton Beach. The easy accessibility of the estuary and the small, approachable, and site-faithful godwit population combined for an amazing research opportunity: following individual birds for multiple years, watching how they schedule and perform their non-breeding activities to best accomplish successful nesting more than half a world away. Insights gained here at the Manawatu Estuary are changing the way godwits, and bird migration in general, are viewed and studied.

Jesse came to New Zealand specifically to study godwits, after several years of working with them and other tundra-breeding birds in remote Alaska. Surprising differences in appearance, habitat, and behavior make breeding godwits nearly unrecognizable by Southern Hemisphere standards. Jesse's talk will focus not just on the Foxton Beach research, but on the godwits' amazing life outside of New Zealand.

Reports

Sunday October 10 - 2010 - Welcome to the Birds!

This trip was lead by Joan Leckie of Manawatu Estuary Trust and Forest & Bird and Mark Zaremba. Also present was Jill Rapson who was on hand to explain about the plants that could be seen on the beach. Also present "watching the birds" were three students from Massey University. One was Jessie Conklin who is doing a thesis on the Bar Tailed Godwit for his PHD and he has been involved with monitoring the migration and the return to New Zealand of the Bar Tailed Godwits for the last 4 years, while Jimmy Choi is working on the ecology of godwits in the South China sea. He was accompanied by his wife Mavis, and the young folk kindly made their expertise and powerful scopes available to the welcome committee.

Just after noon over 30 people arrived for the "Welcome to the Birds" event at The Holben Reserve – Foxton Beach. Informative leaflets explaining the Manawatu Estuary and its birds were handed out to all present. After a brief introduction about the Bar Tailed Godwit and other birds that may be seen, we all set off for the beach. It was very windy but this didn't seem to deter anyone from enjoying themselves.

As it was high tide all the birds were initially grouped together roosting and facing into the wind. The birds seen included:

50+ Bar Tailed Godwits (*Limosa lapponica*). Several birds had coloured rings attached to their legs – I counted 6 but there may have been more.

10 Red/Lesser Knot (*Calidris canutus*). One bird had coloured rings on its legs.

20+ Wrybill (*Anarhynchus frontalis*).

2 Black Backed Gulls (*Larus dominicanus*).

As the tide receded/went out the birds split up into more groups and now different species could be seen. Some other birds arrived, and these included:

2 Caspian Terns (*Sterna caspia*). One in full breeding plumage and 1 in non breeding plumage.

2 Black-billed Gulls (*Larus bulleri*).

1 Red-billed Gull (*Larus novaehollandiae*).

Whilst walking back to the car park a White Face Heron (*Ardea novaehollandiae*) was in front of the Bird Hide and it was wading through the mud feeding.

I spoke to people who attended this event and some were from as close as Foxton Beach itself and others as faraway as Ashurst. All said how much they enjoyed their visit.

The return of these birds to New Zealand has now become a very popular and important event, so much so that it was reported on TV I News the previous weekend that 'the birds are back'.

Report by Mark Zaremba

That time of the year again

It is that time of the year when we ask for subscriptions. As in the past these are \$20 per subscription, including for families. Please fill out the form at the end, and send it in to the Secretary, PO Box 11, Foxton. You can pay in advance or at the AGM, but it will help us get to the bit where we can give our attention to our speaker if you can pay in advance!

Webpage

The Trust is delighted to report that it now has an extensive web page of its own. The easiest way to find it just now is to Google "Manawatu Estuary Trust". Our page is about the third down, but with more use, it should migrate up the list! Check it out, and let us know if there is any material you think we could add.

Many thanks here to Rosemary van Essen for compiling and organising our webpages, and to William Demchick who kindly did the fancy IT stuff to get it up and running.

The ecological condition of the Manawatu River

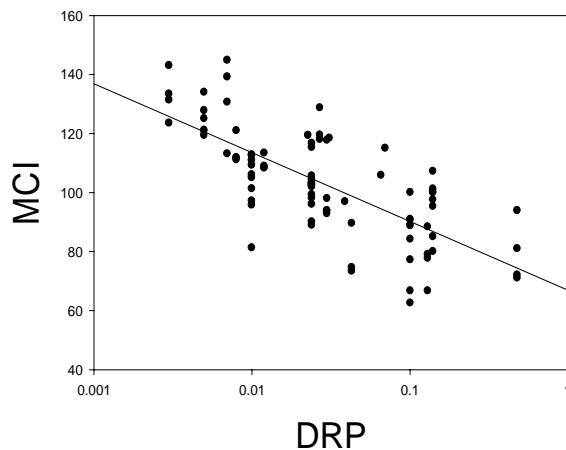
Report by Russell Death

The ecological condition (native fish, sport fish, invertebrates, periphyton and ecosystem function) of the Manawatu River in many places is very poor. There are a number of reasons for this including

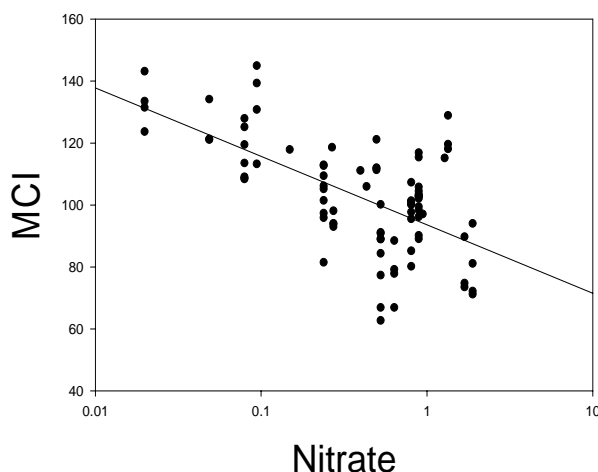
1. Too many nutrients.
2. Too much sediment.
3. Reduction in the amount and pattern of water flow.
4. Reduction in habitat diversity.

Nutrients

I have sampled the invertebrates at a number of streams and rivers in the Manawatu Catchment and found that the health of those communities (MCI – Macroinvertebrate Community Index; high values indicate better water quality) declines as both nitrate and phosphorous levels in the water increase (Fig. 1).



Graph to left: The bottom axis is phosphate, and the Y axis the MCI, the index which measures the health of the small organisms in the stream. As the phosphate level increases (to the right of the axis), the MCI gets lower.



Graph to left: This graph shows that the MCI is also lower when nitrate levels are higher.

Figure 1. MCI for invertebrate communities as a function of nitrate and dissolved reactive phosphorous in streams and rivers of the Manawatu. DRP = Dissolved reactive phosphorus.

Sediment

The ecology of the river is not so much affected by the sediment suspended in the water (turbidity) as it is by the sediment that settles out on the bottom of the stream or river. It can smother animals directly, lower food quality and destroy habitats (most fish and invertebrates live in amongst the substrate during the day coming out at night to feed).

Reduction in amount and pattern of flow

There are many out of stream uses for water including irrigation and town drinking supplies. Abstracting water can reduce the amount available in which animals can live. However, a greater problem is the change in flow pattern that can result from water abstraction. New Zealand rivers are flooded frequently and this prevents periphyton growing to excess and changes in the animal communities that rely on this algae for food.

Reduction in habitat diversity

You can have the greatest water quality in the world and plenty of water and still not have healthy biological communities unless they also have suitable habitat. River engineering for flood control often results in boulders and logs instream being removed, channel meanders being straightened and overhanging vegetation being removed. This results in the loss of habitat that fish (eels, galaxids and trout) use as refugia during the day.

All of these are occurring to a lesser or greater extent in different locations along the river. Improving the biological condition of the Manawatu will take a concerted effort addressing all of these issues.

Note: This report is based on Russell Death's talk to the Royal Society here in Palmerston North in November, 2010.



Manawatu River at the bottom of the Foxton Loop

Members' trip to Estuary South

Jill Rapson is leading a trip for members to the south side of the Estuary. We will have to drive in through Rayonnier's Waitarere Forest block, entering from just south of the Manawatu River. Members can carpool, or take their own cars to the edge of the forest, but we shall take as few as possible through the forestry roads. From our intended park, it will be a 5 minute walk to the estuary along a track, and we can then either bird spot, or explore the lovely saltmarsh vegetation, or both, or just sit and picnic or walk. The trip is timed for a high, but receding tide, so birdwatching on our upstream avifauna is an option.

Date is: Saturday 4 December (tentative - pls check with Jill nearer the time), leaving Palmy at 9am, and meeting coastal folk under the watertower at Foxton, at 10am. Bring lunch, and we will plan on returning about 3pm.

Your comments

Your Trustees welcome your comments and feedback on any item in this newsletter. Let's keep the conversation going - tell us what you think, and take advantage of the Internet to share members' opinions. This newsletter is also being posted - no one misses out.

New members are always welcome so if you know of anyone who has an interest in caring for the Manawatu Estuary get in touch and we can send them a membership form. The subscription still remains at \$20.00.

Very kind regards from all at MET.

For membership, contact:

Secretary

Manawatu Estuary Trust.

PO Box 11

Foxton Beach 4815

Email: info@METrust.org.nz



Looking up the estuary from the Dawick Street platform.



Across the mudflats to the housing along the edge of the estuary.

All uncredited images courtesy Jill Rapson

