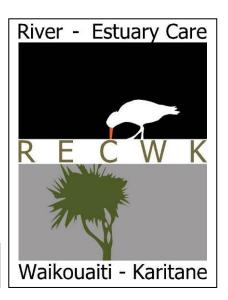
# River Estuary Watch

River-Estuary Care: Waikouaiti – Karitane

**JULY 2015** 



## Highlights from Ki uta ki tai Volunteer Week

We keep rolling along with twice yearly major habitat restoration projects - this year's first added 500 native plants along the estuarine margins of DOC land on the Merton Tidal Arm of the Waikouaiti River. 13 keen volunteers from Ki uta ki ta Volunteer Week were joined by 22 locals. This programme continues to attract enthusiastic hard working volunteers who come out to learn about community



based conservation and offer practical help.

Another positive result of this extra help is that over the past few seasons we are able to propagate many of our own native plants. Visiting volunteers reinforce locals in regular pushes to grow our locally sourced seedlings and see to the necessary repotting and tending required to get the plants to a reasonable size to plant out along the river and estuary. We still count on help for funding habitat restoration projects from private and public funding sources, but are proud to be able to "grow some of our own".

This time around a film crew spent the day with us, recording how we work and the history and successes of local efforts over time. It was great fun having them along for the whole day to share our stories. For most of us it was the first time we'd seen a drone used to film the river – the results of this are seen on the Land Water Air Aoteoroa (LAWA) website with the Waikouaiti River being River of the Month http://www.lawa.org.nz/.

### —Patti Vanderburg



## **Aquaculture**—Fisheries Students Study Estuarine Life

Around twenty-five students, University staff and support people from the local community were involved in a week-long field course based at Puketeraki marae in February. This field course is the major part of a third year Aquaculture and Fisheries paper at the University of Otago.



Student projects focused on the Waikouaiti River and Estuary. Students completed projects that mapped seagrass beds, determined the expansion and impact of the invasive grass *Spartina*, tracked the distribution and abundance of eels and other species along the Waikouaiti River and Estuary and explored the interface between fresh and saltwater in the estuary with implications for whitebait spawning. These projects were developed in consultation with the community and were aimed to address key questions surrounding management of the East Otago Taiapure and connecting ecosystems. The results from these projects were reported to members of the community by each group of students at the end of the field trip. Key findings included a marked expansion of *Spartina*, with the invasive grass now being found in 56 sites in the estuary compared to 19 sites in 2005. The extent and presence of large areas of *Spartina* has also increased markedly. Another interesting finding is that seagrass previous estimates for the estuary may be much lower than they actually are. A report and possibly paper on *Spartina* is being prepared by students from the course and should be provide to the East Otago Taiapure and River Care in the next few months.

The students enjoyed the course and a number of them are keen to complete postgraduate studies on projects similar to the ones they did on the Waikouaiti River and Estuary. The students and staff involved in the course thank the local community particularly the East Otago Committee, River-Estuary Care: Waikouaiti-Karitane and Kati Huirapa ki Puketeraki for their input and support.

—Dr. Chris HepburnMarine Science Department, University of Otago



## Where have all the birds gone?

It was a year or so ago that the Waikouaiti/Karitane Bird Counters completed their one hundredth count. When I set out to write this article in response to comments along the lines of "Where have all the birds gone?", I worked out (there was very little work involved courtesy of Excel) that by March this year the Birders have counted 96,963 birds, which at the present rate means that sometime during this Spring we will count our 100,000th bird. On its own, this tells us very little



about the birds of the Estuary - more about humans in fact. Firstly, we Bird Counters can congratulate ourselves on being very persistent and unfazed in the presence of over 1000 ducks and 2000 or more gulls. Secondly it shows that as a species, we are impressed by anniversaries and milestones, be they merely artefacts of the base 10 numerical system. But, hey any excuse for a party.

However, despite this apparent reverence for numbers, when I actually looked at the bird counts over the last 10 years, I found that we have a very poor, subjective, fluid appreciation of numbers in our past. The Karitane residents who were asking "Where have all the birds gone?" were looking at the same birds on the same Estuary as I (and the bird counters), yet I found myself saying that there was not much change over the last 10 years. The grass was greener when I were a lad, and the summers were warmer - or were they?

It turns out that neither of us, or to look on the bright side, both of us were right.

On the one hand, the total number of birds counted every year has decreased by about 10% but on the other, the counts of most species have hardly changed at all. Over the 10 years the average numbers of Grey Teal (250), Pied Stilt (40), Mallard (220), Red-billed Gull (90) and Pied Oystercatcher (65), have stayed much the same, though that is not to say they haven't had their ups and downs. Grey Teal had "good" years in 2009, 2011 & 12, hitting around 800 in autumn and winter. Little Shags did well from 2010 to 2013, or maybe they were easily counted when they took to lining up on the railway bridge. Then there are species that have varied in numbers a lot. Black-billed Gulls reached well over 2,000 in March 2009, almost 10% of the world population. If you had been out for a walk that year, you would been justified in asking, "Where have all the birds gone?" for subsequently they have rarely topped 500 and in the last couple of years they have favoured Blueskin Bay.

The species whose counts have obviously changed are Spoonbills, Black Swans and Bar-tailed Godwits. Spoonbills have increased over the years, as they have throughout NZ, hitting 64 in March 2012 and regularly topping 30 in the last 5 years. Locally they now nest at Taiaroa Head, Green Island and Moeraki and birds call in at the estuary in late summer and early autumn on their way north to the bays of Nelson and the North Island.

On the other hand Black Swans have decreased, or more precisely, we have not seen numbers in the high hundreds for the last 8 years, a change most likely caused by changes in the food availability in the estuary or adjacent paddocks.

More disturbingly Bar-tailed Godwits have declined as they have nationally, from over 200 in summer 10 years ago to just over the 100 mark in the last couple of years. This decline is not due to any deterioration of conditions in our estuary but caused almost entirely by the reclamation of their feeding sites in the Yellow Sea for industries

producing consumer goods for richer Western nations. They arrive direct from Karitane Estuary after a 10,000km non stop flight, to find their feeding grounds in the Yellow Sea enclosed by sea wall, encroached upon by a coal wharf or polluted by effluent and are unable to refuel for their final 7,000km leg to their nesting grounds in Siberia. Next time you buy that new gadget for your house and garden, think of the godwits.

I wonder what that 100,000th bird will be?

#### —Derek Onley



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To become a friend of the River and Estuary Care: Waikouaiti—Karitane	Phone or email Brad – 03 4658334 or <u>brad126@xtra.co.nz</u>
Should you wish to kindly make a donation	<ul> <li>Enter our name: Waikouaiti-Karitane Rivercare Group Inc) (this will appear on your statement)</li> <li>Enter our bank account number 060942 0190792 00</li> <li>Enter your name and reason for payment e.g. donation to friend of Waikouaiti-Karitane Rivercare Group (Inc) (this will appear on our statement)</li> </ul>
	or post donation to 1333 Coast Rd Karitane

#### River-Estuary Care Waikouaiti - Karitane

Active since 1999 – Incorporated in 2001

Coastal Otago Conservation Award for 2005

#### **Objectives**

- To restore balance to Papatuanuku (Mother Earth).
- To have a well-informed community about our river and estuary.
- To have our community participating in sustainable resource practices.
- To have a healthy, productive river and estuary ecosystem (fishing, biodiversity, general health).
- To promote an understanding of the inter-relatedness of our river and estuary ecosystem with adjacent ecosystems.

## Anyone interested in supporting the above objectives may join! Would you like to help with a project this year? Then contact

- Newsletter Hilary Yeoman ph 465 7687.
- Revegetation project contact Andy Barratt ph 021 890 048.
- Education, information and advocacy project contact Patti Vanderburg ph 465 8113.
- Birdwatching contact current convener Allan Kilner, phone 465 8411.

Otago Regional Council

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