



# The Inlet

Newsletter for Guardians of Pāuatahanui Inlet

AUGUST

2023

*The Inlet is a newsletter that brings together local and regional news affecting the Pāuatahanui Inlet and its environs.*

*The Inlet comes out three times a year and current or back issues can be downloaded from our website.*

*The newsletter includes items of concern that affect the area as well as general interest topics for everyone.*

*Please contact us if you would like to contribute to The Inlet.*

P O Box 57034

Mana

Porirua 5247

[pauainlet@gmail.com](mailto:pauainlet@gmail.com)

[www.gopi.org.nz](http://www.gopi.org.nz)

## Inside this issue:

- Photographic Competition 2
- Annual General Meeting 3
- Our New Treasurer 3
- We bid Stephen farewell 4
- Our new Website 5
- Cockle Survey 2022 6
- FEATURE ARTICLE— Birds of P.I. 8
- Emergency Numbers 10
- Membership Form 11

## FROM THE CHAIR

As you may know, Porirua City Council is undertaking a catchment-wide streamside (riparian) planting programme. It is based on a 2021 comprehensive report by the CARDNO consultancy\*. This report contained detailed information and recommendations on locations, priorities, species and cost estimates for streamside plantings. These plantings are intended to help prevent sediment and contaminants from entering streams and, consequently, the Inlet. But in the Inlet catchment, this can only help arrest problems caused by land use practices. These practices need to change, otherwise the streamside plantings will only be the ambulance at the bottom of the cliff.



In summary, the biggest risks to the Inlet from erosion and sediment deposition come from pastoral farming, especially farming on higher, steep hill-country, with no restrictions on stock accessing the waterways. Forestry harvesting also poses risks. Ideally, all the steep hill-country areas in the Inlet catchments need to be permanently retired from their current farming or plantation forestry land uses and planted in native species

The CARDNO report contains the following findings on the four major Inlet streams:

- ⇒ *The Pāuatahanui Stream catchment is predominantly rural. It has relatively unstable banks and contains a high proportion of fine sediment. Its steep landforms and high farm stocking rates result in much of its catchment being at moderate-to-high priority for riparian management. Many of its contributory streams need urgent planting and stock exclusion. Otherwise the catchment is at risk of increasing fine sediment entering the Inlet.*
- ⇒ *The Horokiri Stream catchment (which includes Ration Creek in the CARDNO assessment) is also predominantly rural. Stream banks in its higher tributary catchments are at moderate-to-high risk from erosion while its lower reaches are in better condition. Not surprisingly, the steep upper hill-country poses the biggest risk of land slumping and erosion, with pastoral land-use increasing that risk. Some of the catchment is planted in native species and these considerably lower the risks. Most of this catchment is in need of riparian management with many contributing streams in the upper reaches in poor condition and a priority for planting. Retiring these areas from pasture would be desirable. Some of the catchment is in plantation forestry and this needs very careful management if and when harvesting is undertaken.*

### *From the Chair cont....*

- ⇒ *The Kakaho catchment is in very poor condition and requires priority planting over much of its landscape. Especially in its upper reaches, it is probably in the worst condition of any catchment in the wider Porirua Harbour catchment area. Again, pastoral farming poses the biggest risk as does forestry. As with the Horokiri catchment, the steep upper hill-country is the problem area with land-slumping and erosion a big problem. Forestry harvesting, particularly in the west of the catchment, poses a high erosion risk. The Plimmerton Farm development offers lifestyle growth on the north-western, high hill-country of this catchment. This will need very careful management. Some of the catchment is planted in native species and these considerably lower the risk of major damage from erosion and sediment.*
- ⇒ *Duck Creek is in relatively good condition in its lower reaches and medium condition in its middle reaches but its whole upper catchment — extending into Belmont Park and under the TGM motorway — is in very poor condition. As with other Inlet catchments, pastoral farming with stock access to contributory streams poses the biggest risk and erosion, slumping and sediment deposition follow from this practice. Greater Wellington Regional Council's Parks Plan envisages progressively retiring Belmont Park from pastoral use. This will make a big difference to erosion risk. Interestingly, the urban reaches of Duck Creek contain various streamside green strips and, unfortunately, weeds. Even so, earthworks from urban development — past and present — provide sediment sources and erosion risks.*

This report isn't good news for the Inlet. However, on a brighter note, the articles in this newsletter on findings on the Cockle Count and Bird Life in the Inlet are optimistic. Let's hope this continues.

(\* Porirua City Council Riparian Management Strategy, Cardno (NZ) Limited, 25 June 2021.)

## PHOTOGRAPHIC COMPETITION RESULTS

This year we had just 13 entrants to our competition, of which two were under 18. This represents, I believe, the lowest level of support we have had over the years this event has been running and is probably due to several factors including the two cancellations of recent times and loss of our previous advertising channels. Several entrants submitted a number of photographs but the lower number overall did make for a challenging selection process by our resident judge, Geoff Marshall. However, every image was fairly assessed and all prizes, first to third, plus Junior and Youth, were allocated to photographs that met the criteria. Several entrants took home more than one prize this time.

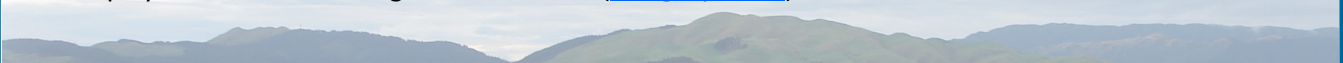
On the whole, the standard of photography was high with some great photographs in the mix, showing the beauty of Pāuatahanui Inlet in various conditions of weather and lighting.

The Prize Giving took place at the Helen Smith Room, Pataka on Sunday 11 June. It was a great success with almost full attendance from the entrants and, in some cases, their parents as well. Keith Harrison's introductory talk was a well-received and highly interesting personal view on what it takes to make a good photograph based on his own experience and development as a keen photographer. And, as a follow-up, he was on hand to give out the awards to each winner.

Several of the winning images have already been included in our new, re-vamped, website, and others are likely to be added as the need arises.

Following the prize-giving, the exhibition of winning photographs was displayed in the Porirua library for two weeks, followed by two other locations, Palmers and the Lighthouse Cinema.

We hope you had a chance to go and see them. ([Google photos](#))



## ANNUAL GENERAL MEETING

This year's AGM, Wednesday 28 June, was held for the first time in a new venue, the Whitby Baptist Church beside the lower Whitby lake and the facilities at this location were excellent.

We had one of the best attendance numbers ever, with a total of 24 including our 2022 committee and guest speaker, Keith Michael. Some regular and very dedicated former committee members were there giving us support and, from the general membership, even several new faces, to which we extended a very warm welcome.

The formal part of the meeting was kept to a minimum. Lindsay picked out some salient paragraphs of the Annual Report and followed this with our financial summary for the year. Election of next year's committee followed with all but one of the current team members continuing in their respective roles. Stephen O'Neil, who has been our treasurer since 2015, stepped aside this time giving way for the selection of a new person for the position. Marg Glover answered our call in the April newsletter and, after being seconded onto the committee just two weeks prior to the AGM, was duly elected as our new treasurer. We were thrilled she could fill the role so quickly as it has made the transition seamless for the team.

Both the [Annual Report and Financial Summary](#), as accepted by vote, are available to view on our website.

With the formalities complete, Lindsay Gow introduced Keith Michael who gave an overview of the 2022 cockle survey and its outcomes. Keith is a fisheries scientist from NIWA, and directly involved with collation of the raw data obtained from the community count and analysis of the results. We were really pleased to have Keith at the AGM because he has been connected with the survey for a good number of years now and was able to explain how important it has been over that time. With the design consistently maintained throughout its history, the survey has allowed a valuable time-series of results to be built up creating a valid picture of the evolving cockle population in the intertidal zone of the Inlet.

Details of the survey results presented by Keith are explained later in this newsletter and the full report is available on our website: [gopi.org.nz/cockle-surveys](https://gopi.org.nz/cockle-surveys).

---

## OUR NEW TREASURER



We are very pleased to announce our new treasurer, Marg Glover, who took over from Stephen O'Neil at the 2023 AGM.

Marg was seconded onto our committee in June after she responded to our request for a treasurer in the April newsletter and she took up the role in an interim capacity about two weeks prior to the annual meeting.

Marg had lived in the UK for 36 years, returning to NZ in 2016. She and husband Simon settled into their home in Paremata in 2017.

Marg says the position of treasurer will benefit from her university management roles in her later career, after shifting from a scientific research background. She says that GOPI has provided her with an opportunity to 'give back' and both she



### **OUR NEW TREASURER...cont.**

and Simon have enthusiastically contributed to rubbish collection, Inlet planting projects and the most recent cockle count.

Marg enjoys lots of outdoor activities such as paddle-boarding, kayaking, sailing, hiking and cycling, and really enjoys the various amenities offered by the Inlet. She is passionate about the environment and the preservation of native flora and fauna, really enjoying such experiences as the visits of orcas to the Inlet.

She is looking forward to participating fully in the activities of the committee and we welcome her aboard.

---

### **WE BID STEPHEN FAREWELL**

After 8 years on our committee we say goodbye to Stephen O'Neil, our treasurer since 2015. Stephen has in that time been a stalwart of the organisation, quietly ensuring our finances stay in good order.

Stephen was introduced to GOPI in 2015 by Beverly Fairfax who was our previous webmaster. They first met in 2012 as amateur actors for the Mana Little Theatre in Plimmerton which is where Stephen also met his wife to be, Katherine.

By profession Stephen is an accountant and he was working in that role for VTNZ at the time. Beverly shouldered him for treasurer when Dick Fernyhough was retiring from the position. Coming on board at the 2015 AGM, he quickly slotted into the role.

In 2016 we all had a giggle when he was seen on national television in a well-known advertising campaign for the road safety company.



He became a stay-at-home dad later in that year to look after his son, Daniel, although he continued working part-time for about six months. After a few years he joined Playcentre Aotearoa as Chief Financial Officer and, with Katherine now working as a teacher at Plimmerton School (which Daniel also attends), they are doing the working-parent juggling act, making life very busy. In addition, Stephen now volunteers as Kea Leader for the Ngatitoa Sea Scouts after Daniel joined the youth group.

Stephen says 'I've enjoyed my time on the GOPI committee and learned a lot about the Inlet and the issues facing it from some very knowledgeable committee members. I plan to still be involved as an active member, taking part in clean-ups, plantings and cockle counts and hope to involve Daniel in this too.'

Stephen is still active in the background while our new treasurer Marg Glover, who is overseas at the moment, gets up to speed with the role. Meanwhile, we wish Stephen and his family all the best for his future life outside of the GOPI committee.

---



## OUR NEW WEBSITE

Well, it's up and running and this is what it looks like.



After nine months of development the new website came on line 10 June 2023 and is now providing an improved spotlight on the Guardians of Pāuatahanui Inlet's activities and the Inlet itself in all its various aspects.

The domain name is the same as before ([gopi.org.nz](http://gopi.org.nz)) — no difference to the former site when looking for the home page — but it is now much more suitable for all devices from desktop computers down to smart mobile cellphones. This is because it automatically re-arranges the elements to suit the vertical screen of a mobile, or the slightly larger screen of a tablet.

But....there is a problem in different browsers. If 'www.' is inserted in front of the address the browser can report that the site is not available. There may a couple of solutions to this:

1. You can try deleting the browsing history. That may remove the stored domain name, or
2. In Explorer you can go to 'Task Manager' (under 'More Tools') and delete the saved domain name.

Adam Rosner is now hosting our site and will introduce a fix for this problem in due course.

The new site has a flash new look and layout and now includes an easy way to read our newsletters (both current and past), an online feedback form and an application form for new membership.

Now that we have a new website the old one has been rendered inactive for general access. We are of course able to visit it with a different address and this will be the case for about six months. This will enable us to take information from it if there is a need to transfer this to the new site but much of what has been left out of the new site is probably not needed.

◇ On that note, we offer the option of including anything from the old site that members, or other interested parties remember and found useful. Please let us know by October, advising us by email at [pauainlet@gmail.com](mailto:pauainlet@gmail.com).

## COCKLE SURVEY 2022

The most recent survey of cockle populations in the Inlet was conducted in November 2022 and involved around 80 volunteers including GOPI members and other supporting groups. This was the eleventh survey since these surveys began in 1991 and together they provide a valuable time-series of data to draw upon.

NIWA has analysed the raw data from this survey and on 16 June 2023 released the completed report that describes the current status of cockles in the Inlet.

A graphical representation of the changing population levels of this iconic indicator species taken from this latest report is included on the following page.

The full report is a long one but in summary it shows that:

- The estimated mean population of cockles in the Inlet as of 2022 is 440 million. This figure is the highest recorded estimate since 1992, representing an increase of 86.5% between the years 1992 and 2022. This estimate also represents 84% of that obtained from the first and highest population survey taken by the New Zealand Oceanographic Institute in 1974.
- Most transects in 2022 had higher or markedly higher total counts of cockles than recorded in previous surveys.
- The highest number of cockles recorded per 0.1 m<sup>2</sup> quadrat in 2022 was 289, higher than in previous surveys.
- The mean cockle density over the intertidal survey area in 2022 was 44 cockles per 0.1 m<sup>2</sup>, the highest since 1992.
- The percentage of juvenile cockles in the population increased markedly between 1992 and 2004 from 1% to 16% and has remained high, measuring 19.8% in 2022. The high percentage of juveniles since 2004, with the population increasing over this time, suggests regular recruitment and good survival of newly settled spat over their first winter.

From these results it can be inferred that there has been successful settlement of larvae and within the intertidal areas, or that there has potentially been some immigration of juvenile cockles from subtidal areas.

The high percentages of cockles above spawning size (larger than 18 mm in length) should maintain larval production in the Pāuatahanui Inlet in future years.

It is important to note that this trend is not consistent with the expectation that there would be a relatively high mortality of small cockles after the 2016 floods. This event did result in a short lived reduction in the cockle population found in the survey of that year, but recovery has been strong and continuous since then.

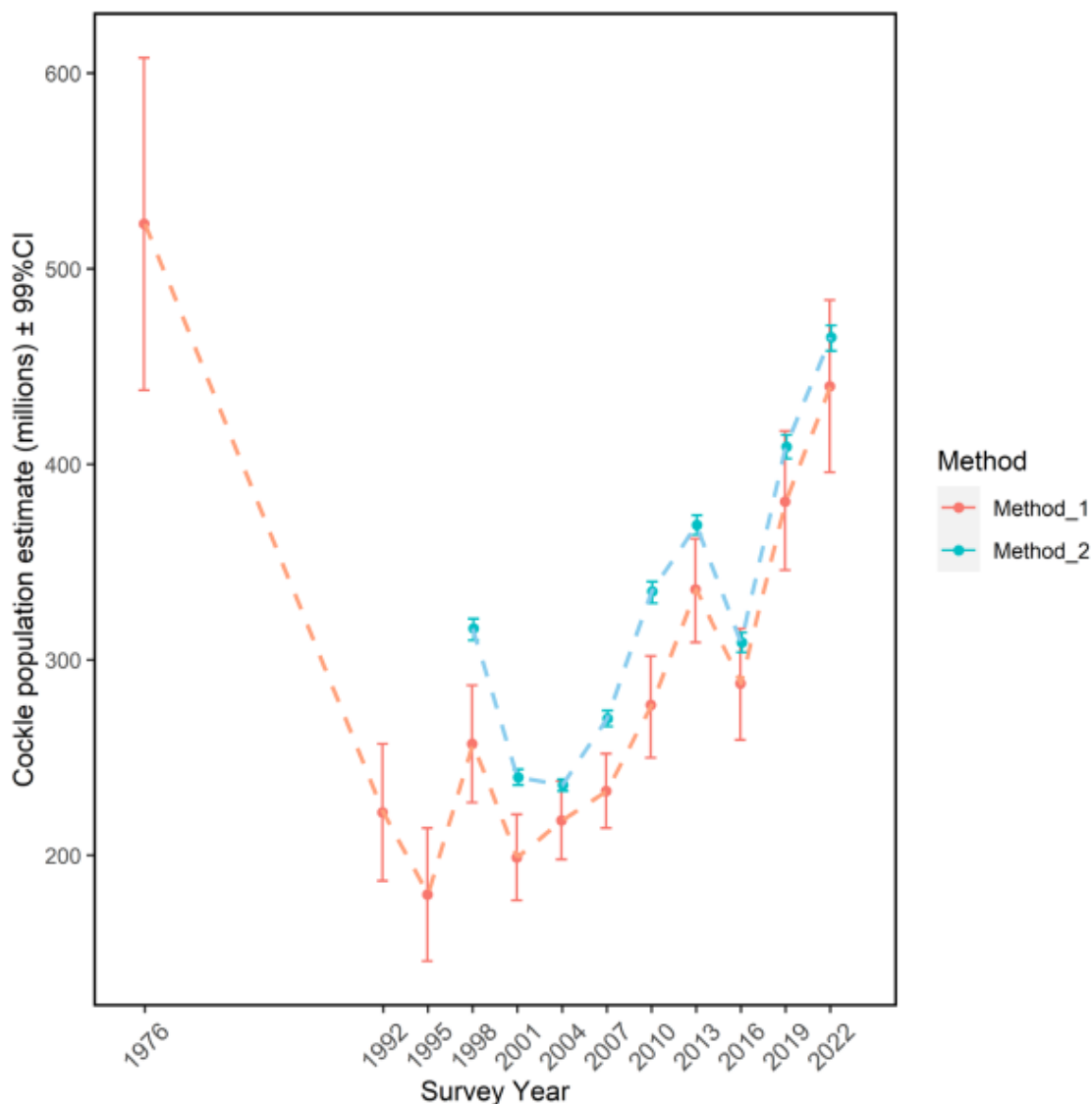
Perhaps the most important factor that has come from this project is that the long-term growth in population has not revealed a significant impact due to the continued concerns we have for the health of the Inlet as a whole. It is apparent that deteriorating environmental conditions in Pāuatahanui Inlet considered deleterious to cockles, particularly the increase in terrestrial sediments, do not appear to have affected the intertidal cockle population as a whole, although some localised effects are evident in places.

The cockle is considered to be the most important species in the harbour. As a filter feeder, it is estimated that, collectively, cockles may filter 1.6 m<sup>3</sup> of water during each tide cycle of Pāuatahanui Inlet with



### Cockle Survey 2022....cont.

profound effects on the environment. For this reason, changes to the water quality, particularly clarity and mineral content, should also have a direct effect on the health of this animal. Its continued success may be a good sign that the harbour water is not too adverse for survival of cockles and, therefore, possibly the overall biota of the Inlet is adapting to the changes that continue to occur.



Graphical representation of Pāuatahanui Inlet cockle population since 1976

Note 1: CI = Confidence Interval

Note 2: See full report for explanation of Method 1 and 2

If you would like to read all or some of the full published report it is available to view on our website ([gopi.org.nz/cockle-surveys](https://gopi.org.nz/cockle-surveys))



## FEATURE ARTICLE

*For the feature article in this issue we deviate a bit from the normal format and incorporate a report from Ian Armitage of the The Ornithological Society of New Zealand. He has kindly contributed this report on the latest information about bird populations found in and around Pāuatahanui Inlet.*

### Trends in the occurrence of some birds in Pāuatahanui Inlet from 1982/83 to 2022/23

*A report by Ian Armitage from the Ornithological Society of New Zealand.*

The Ornithological Society of New Zealand has monitored birds in Pāuatahanui Inlet since 1982/83, a survey that is repeated every 10 years. The fifth series of counts of this long-term programme commenced in April 2022 and will continue until March 2024. Counts are made each month for two years and then are paused for eight years before the next cycle begins. The counts are carried out on the first Sunday of each month by Wellington members of the Society.

A reliable record of the change in the occurrence, numbers and seasonal distribution of Inlet birds over a period of 40 years will have accumulated once this current series of counts is complete. So, what have we learned, so far?

Overall, 31 wetland, estuarine and oceanic bird species have been recorded in the Inlet as well as 26 land species. More bird species are being recorded now than in 1982, due to the natural arrival of several new species and by one recent introduction (the North Island fernbird) by members of the Pāuatahanui Wildlife Reserve. Pied shag, royal spoonbill and Canada goose are well established now but these species were not present some 30 to 40 years ago. Some species are now more numerous than they were 30 or more years ago, notable amongst these being the South Island pied oystercatcher and the little black shag. Uncommon wetland species are New Zealand dabchick and Bar-tailed godwit. Three recent and natural arrivals of land birds are bellbird, kereru and New Zealand falcon.

It appears that the total number of birds in Pāuatahanui Inlet's wetland habitats may be decreasing. On-going surveys will determine whether this worrying trend continues, whether or not it is seasonal and which species are most in decline. At least part of the decline is that of black-backed gulls, fewer now being counted than there were 40 years ago.

Comparisons for the July-August-September period (winter months) between 1982 and 2022 illustrate this broad trend and are shown in Table 1.

Table 1: Changes in number of birds and species in winter, 1982 to 2022

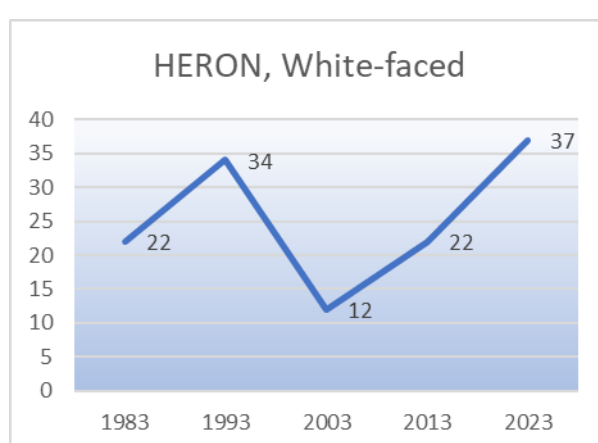
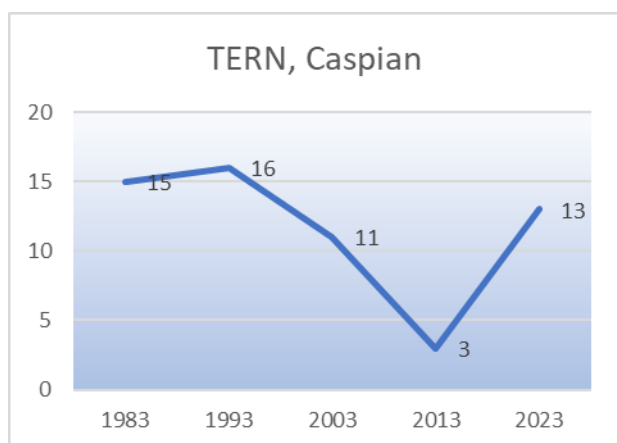
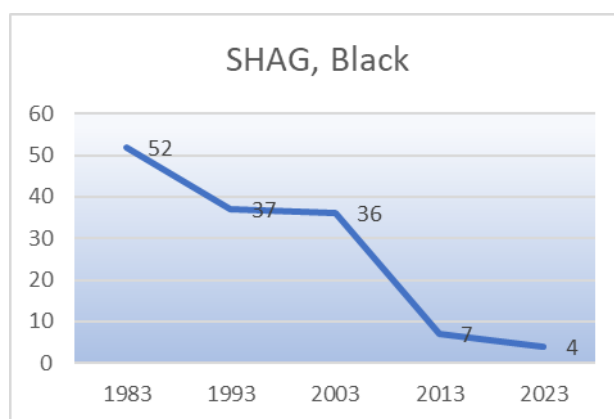
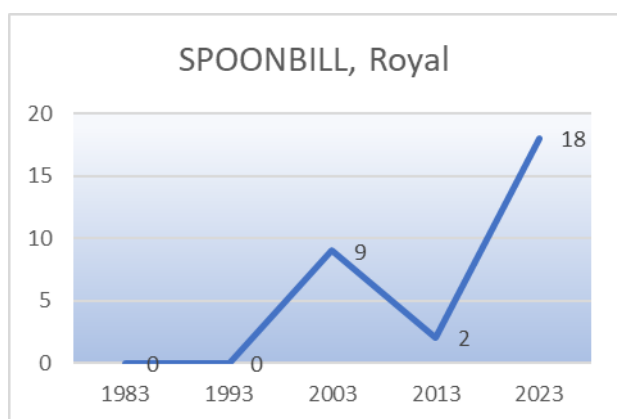
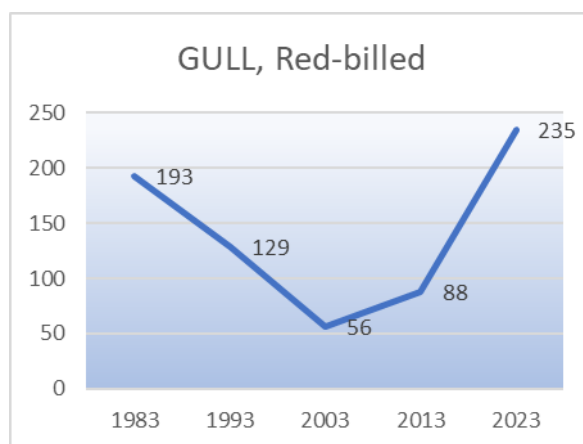
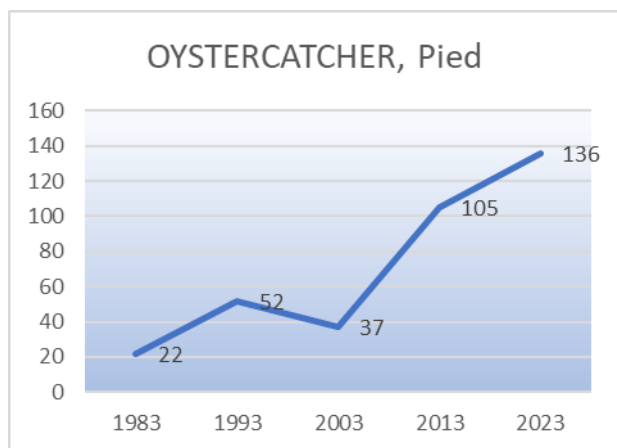
Year	Average No. Birds	Average No. Species
1982	1,700	29
1992	1,262	30
2002	729	39
2012	661	36
2022	869	41





*Feature Article ...cont.*

Trends for six named oceanic and wetland species (some having conservation-threat rankings) from 1983 to 2022 (June & July) are shown in the following charts.



It is evident that the numbers of several bird species are increasing while others are in decline. Most, however, have generally stable populations. The reasons for this pattern vary but are probably caused by adaptation to changing land and wetland habitats. Some species are better able to adapt to the changes than others. Declining or increasing food supplies, improved protection from predators and changes to nesting environments are all factors that can influence bird populations.

### *Feature Article ...cont.*

Some information from this Pāuatahanui Inlet bird survey programme is being used for regional environmental planning purposes by the Greater Wellington Regional Council and Porirua City Council.

Ongoing monitoring is desirable and it is hoped that members of the Ornithological Society will continue this project for several decades more.

This information can also be used to raise awareness of the various bird species found in Pāuatahanui Inlet and to encourage their continued protection.

#### **Ian Armitage**

Council member of the Ornithological Society of NZ ([birds.nz.org.nz](http://birds.nz.org.nz))

---

## **PLEASE SIGN UP A FRIEND OR NEIGHBOUR**

**S**ign up a neighbour, friend, or another family member. Just explain to them that membership numbers really count in giving us a strong voice to argue for what we all value about the Inlet.

On the back page of this newsletter is our Membership Form which can be filled in and emailed to us at [pauainlet@gmail.com](mailto:pauainlet@gmail.com). Also, you can forward this newsletter to someone else with just a note encouraging them to join.

Alternatively, you can visit our website where we have an on-line Membership Form which can be submitted directly from the site [gopi.org.nz/join-us](http://gopi.org.nz/join-us)

### **EMERGENCY NUMBERS FOR THE PĀUATAHANUI INLET**

**Pollution:** Discharges of contaminants to air, land, storm-water drains, streams, rivers or sea and for after hours consent enquiries: Greater Wellington Regional Council – 0800 496 734 (24 hours)

**Boating infringements:** Greater Wellington Regional Council – 384 5708 (24 hours)

**Illegal fishing activity:** Ministry for Primary Industries – 0800 476 224 (24 hours)

**Pāuatahanui Wildlife Reserve:** Department of Conservation – 0800 362 468

**Let us know what you have reported so we can keep an accurate record and follow up if necessary.**

**235 5052 (Chair, GOPI) or [pauainlet@gmail.com](mailto:pauainlet@gmail.com).**



# Guardians of Pāuatahanui Inlet

[www.gopi.org.nz](http://www.gopi.org.nz)  
[pauainlet@gmail.com](mailto:pauainlet@gmail.com)

## MEMBERSHIP FORM

To join the Guardians of Pāuatahanui Inlet you may pay your subscription in person or on line.

TO MAKE YOUR PAYMENT	NOTE
<p>Pay your subscription at a bank branch, or on line, into our Westpac account: <b>03-1533-0009387-00</b>. When on line, use the 'Particulars', 'Code' and 'Reference' columns to write your <b>surname, initials</b> and the <b>period</b> of your sub (1-yr or 5-yr).</p>	<p>We do not have a postal address so please email all correspondence.</p> <p>If you have something that cannot be delivered electronically please send a request by email and we will contact you to arrange collection.</p>

Then print out this form and fill in all details.

Name .....	
Address .....	
Email .....	Phone .....

Please put 'x' next to the subscription you are paying.

You can also make a donation. (We are a registered charity for tax purposes. Registration Number: CC47523).

One-year individual (\$12.00) .....	<input type="checkbox"/>	Five-year individual (\$50.00) .....	<input type="checkbox"/>
One-year family (\$15.00) .....	<input type="checkbox"/>	Five-year family (\$60.00) .....	<input type="checkbox"/>
Donation \$ .....	Do you require a receipt for your sub? <input type="checkbox"/>	or your donation? .....	<input type="checkbox"/>
<p>For online banking – Bank <b>Reference</b> appears as .....</p> <p>Date subs were paid .....</p>			

We'd like to send you newsletters and notices via email. May we do this? ☐

Please put 'x' in a box if you would like to take part in one or more of our activities.

Annual Clean Up day .....	<input type="checkbox"/>	Submissions to local bodies .....	<input type="checkbox"/>
Three-yearly cockle survey .....	<input type="checkbox"/>	Restoration Planting .....	<input type="checkbox"/>
Website and video clips .....	<input type="checkbox"/>	Other: .....	<input type="checkbox"/>

Now scan and email the form to: [pauainlet@gmail.com](mailto:pauainlet@gmail.com)

*Thank you and welcome to the Guardians*