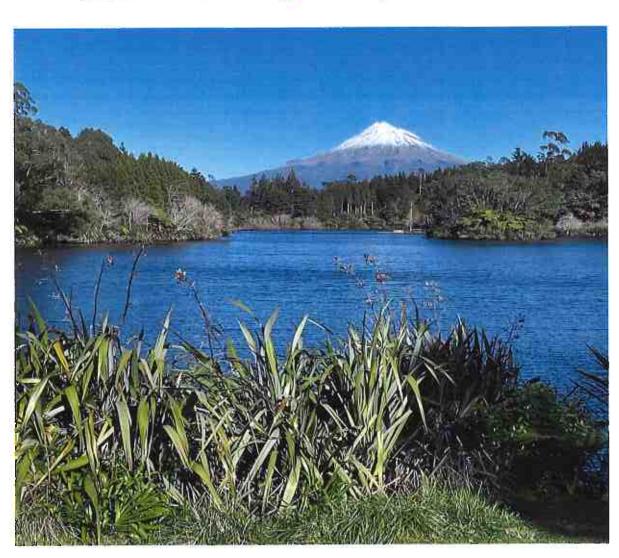


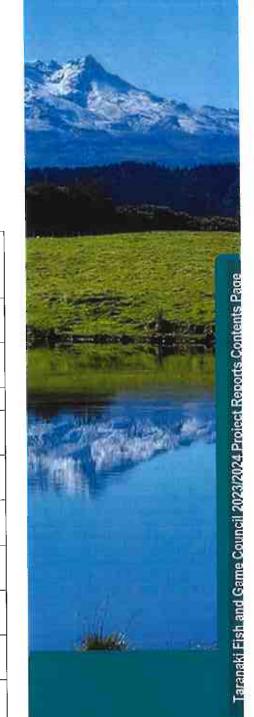
Taranaki Fish & Game Council

2023/2024 Project Reports



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Game Gazette Notice 2024 - Taranaki Fish and Game

This report has been prepared for the Taranaki Fish and Game Council, in relation to regional game regulations.

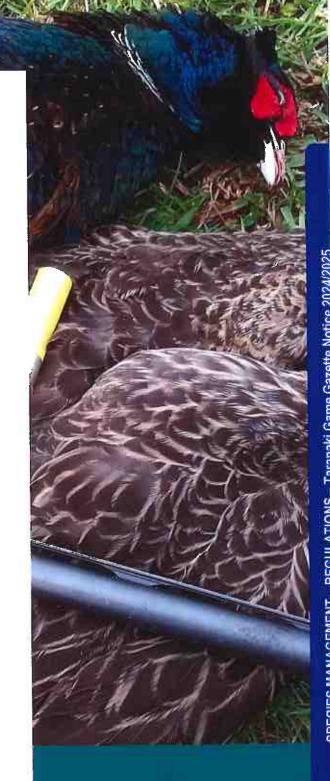
The report includes Harvest and Trend Count Data alongside Hunter survey results to provide an overview of various gamebird populations throughout Taranaki – and presents a discussion on the effect of changing bag limits.

Allen Stancliff

Senior Fish and Game Officer

Taranaki Fish and Game Council

December 2023



TARANAKI FISH AND GAME COUNCIL

The Chairman

Taranaki Fish and Game Council

DRAFT 2024/25 GAME SEASON GAZETTE NOTICE

Background

Since 2016 the Council has had a policy of retaining consistent game regulations from year to year unless new information supports a need to make significant changes to protect the resource.

This reflects that detailed analysis of long-term harvest data from the Eastern Region indicates that large changes in bag or season length would be required to make any meaningful difference to the duck harvest.

There is also increasing evidence that maximising bag limits does not necessarily maximise hunter satisfaction. To maximise sustainable harvest also requires precise and accurate monitoring. However, with such patchily distributed and highly mobile species like ducks, it is both difficult and very resource intensive to achieve robust estimates. This is further complicated by the timing of the gazettal process which requires that Council agree next season's recommendations in December before we can measure this spring's production.

Second, total harvest is directly related to total effort and analysis by Eastern Fish and Game found annual changes in effort were best explained by changes in the duck population size. In other words, in years of low duck numbers, hunters spend less time in the field and the total harvest is inherently smaller irrespective of any regulation changes. Hunter behaviour in Taranaki is expected to display a similar trend.

Collectively, all these factors suggest that rather than trying to maximise bag limits every year Council is better to set consistent season conditions which they can be confident do not impact on resource sustainability while providing sufficient opportunity and setting realistic expectations which ultimately result in greater overall hunter satisfaction.

This consistency from year to year also provides hunters with confidence that they are adhering to season regulations and can invest in equipment and/or habitat development and predator control programmes to improve the game bird resource.

This paper is presented from the perspective of whether there is any good reason to depart from the status quo for each gamebird species.

Current Population Status

Grey and Mallard Duck (Greylard/rakiraki)

Given the degree of interbreeding and hybridisation between mallard and grey duck these species are treated as a single population for this discussion.

From 2016 - 2019 annual aerial counts along 20 randomly selected transects were undertaken around the Taranaki ringplain in early April using a helicopter. After missing two years of flights (2020 and 2021) owing to Covid—19 lockdowns and covid-related budget cuts, aerial helicopter transect flights were resumed in April 2022. The 2023 count was the lowest tally so far with 1,273 greylards counted (Figure 1), 344 less than the 2022 count. There were two limitations to the accuracy of the 2023 counts which relate to the survey conditions. First, the timing of flights meant the angle of the sun on ponds made it difficult to see all birds present on the water and this may have decreased the count this year. Second, the helicopter flew higher during the survey than previous years which made counting more difficult and likely contributed to the reduced overall count.

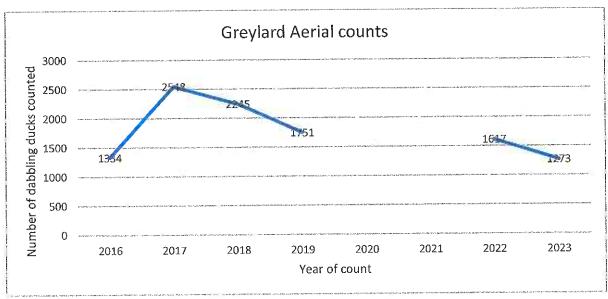


Figure 1. Total Greylards counted during helicopter aerial transects in the Taranaki ringplain, 2016 - 2023.

The hunter survey results for last season (2023) indicate that there was a decrease in hunter success rate from 2022 although it was still on the average (Figure 2). There was a slight increase in hunting hours and a small decrease in overall harvest compared with 2022 (Figure 3).

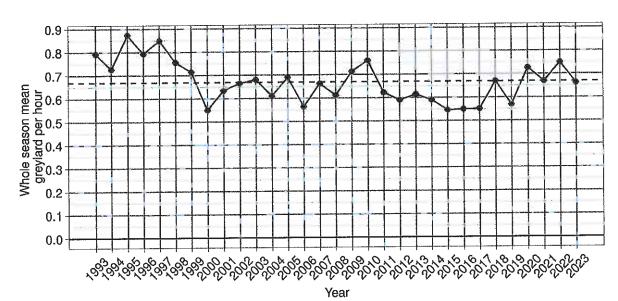


Figure 2. Average hunter harvest rate of greylards (ducks per hour) from the National Hunter Survey 1993 to 2023 seasons.

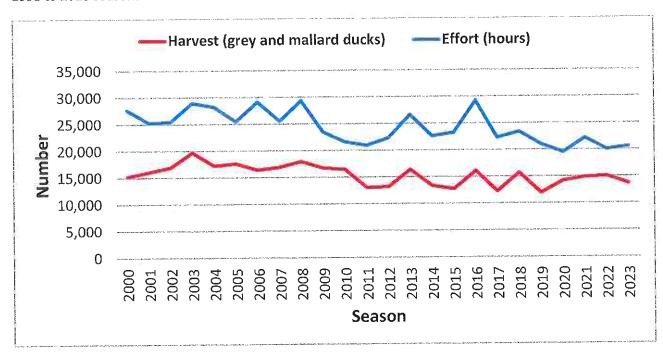


Figure 3. Total hunting effort (hours) and harvest of greylards in the Taranaki region 2000 to 2023.

Although the bag limit for greylard duck was increased from 10 to 15 for opening weekend 2023, this did not result in an increase in the average opening weekend bag taken by hunters (Figure 4).

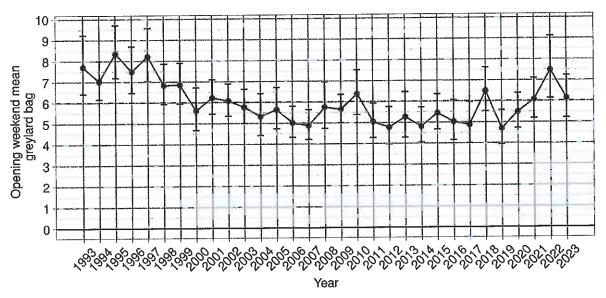


Figure 4. Average opening weekend bag for greylard duck in the Taranaki region 1993 to 2023.

Analysis of individual survey results from Taranaki hunters hunting in Taranaki on opening weekend 2023 (Figure 5) indicated that the increase in daily bag limit from 10 to 15 resulted in a 7.7% increase in harvest (an extra 44 ducks in the total of 572 ducks harvested by survey respondents). A daily bag limit of 12 (as recommended by the Wellington F&G for the whole of the 2024 season) would have resulted in a 3.5% increase, or 20 additional ducks harvested by the survey respondents. While this

analysis has not been done for the whole season, a 12-bird limit is likely to result in only a minor increase in harvest.

Given this analysis, and the intention to align regulations between the Wellington and Taranaki regions where practicable, it is recommended that the Council set a 12-bird limit for greylard duck for the whole of the proposed 8-week season in 2024.

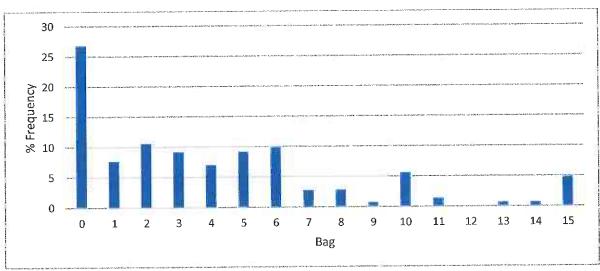


Figure 5. Daily greylard bags achieved by Taranaki hunters on opening weekend 2023 in Taranaki (from hunter survey results n=142). Many of the hunters who didn't shoot any greylards were targeting paradise shelduck.

Shoveler Duck

Monitoring of known aggregations of Australasian Shoveler Duck (Kuruwhengi) has occurred in early August each year since 2000. At this time, birds congregate to select mates before dispersing to secluded breeding sites. Monitoring occurs concurrently throughout New Zealand to reflect the view that the population is a single national population with birds moving throughout NZ.

Across the Taranaki region 422 shoveler duck were counted on 7th August 2023, which was 18% higher than the long-term average (359 ducks) and 100 more than last year's count of 322. The 2023 national count (12,272 birds at 256 survey sites) increased 34% on the 2022 count. However, the long-term trend indicates a very small decrease in count, which is likely to reflect what is happening in the observed population at survey sites.

The low level of harvest during the 2023 game season was consistent with recent seasons (Figure 6) and the low numbers suggest shoveler are not generally targeted by Taranaki hunters and/or are not particularly prevalent in Taranaki during the game season. Given the low harvest, it is recommended that the status quo of a 2-bird bag limit and 8-week season be retained for 2024.

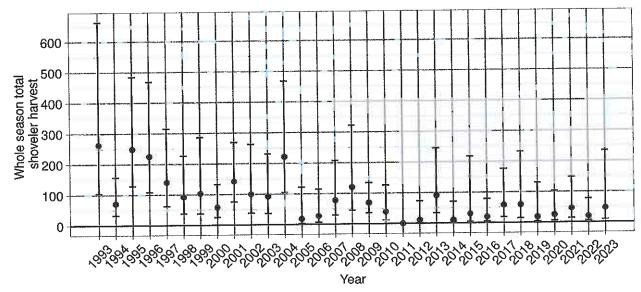


Figure 6. Estimated Shoveler duck harvest in the Taranaki Region 1993 to 2023 seasons (National Hunter Survey).

Paradise Shelduck

The paradise shelduck (Pūtangitangi) moult count in January 2023 in the Waimarino region (3,409 paradise shelduck) represents 213 birds per moult site which is lower than recent years (Figure 7). Counts around the Taranaki ringplain showed a slight increase in total birds but a slight decrease in birds per site (327 per moult site and 14,063 in total). The Whanganui count remains at relatively low levels, with this year being the lowest recorded count of 1,784 birds, or 178 birds per moult site.

The counts suggest that the population is stable but at the 'low end' of the historical range of abundance in the Waimarino. The continued downward trend in the Whanganui count is of concern and suggests possible overharvest.

The operational amalgamation between Taranaki and Wellington will allow monitoring of the Waimarino and Whanganui paradise shelduck populations to be added into the Wellington aerial counts in January 2024. Aerial counts of existing and potential moult sites should help to answer the question as to whether there are moult sites that are not being counted, or whether the current count accurately reflects what is happening in the population. If counts in Whanganui continue to decrease, then a review of season length and bag limits will need to be undertaken.

For comparison the estimated total harvest of 6,044 paradise in 2023 (Figure 8) was lower than in 2022 (8,964 birds) and well below the long-term average of 9,927 birds. Reasons for the reduction in harvest are not readily apparent but could be related to declining numbers in the Whanganui/Waverley area. The whole season harvest rate (birds per hour) was much lower than average in 2023 and very similar to 2011 (Figure 9).

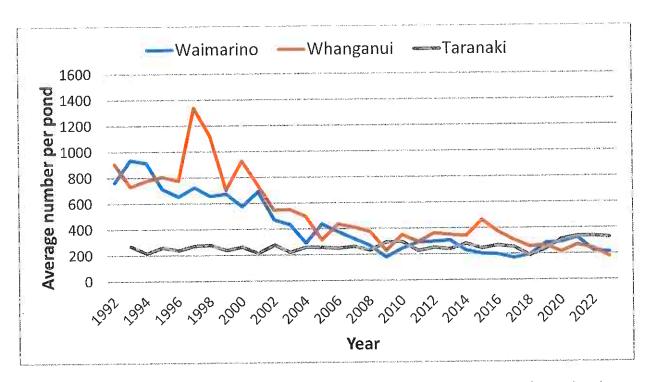


Figure 7. Average number of Paradise shelduck per moult site counted across the Waimarino, Whanganui and Taranaki areas from 1992 to 2023 moult counts.

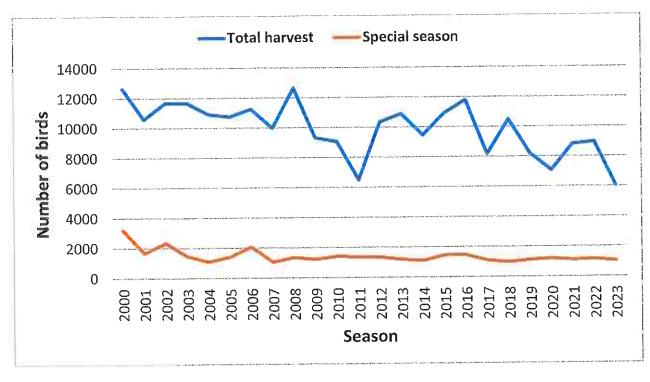


Figure 8. Estimated special season harvest and total annual Paradise shelduck harvest across the Taranaki region 2000 to 2023.

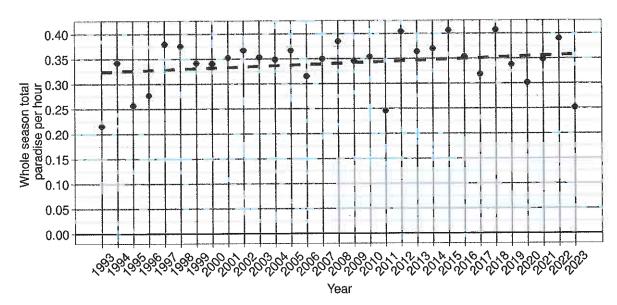


Figure 9. Whole season harvest rate for Paradise shelduck (birds per hour) in the Taranaki Region, 1993 - 2023. Data excludes harvest during the special summer season.

The special summer season for paradise shelduck in Area C continues to play an important role in the dispersal of post-moult birds that cause a nuisance to farmers by grazing and fouling areas of new grass, recovering hay paddocks and fodder crops like chicory. It also provides an additional hunting opportunity for licence holders and land occupiers. As Figure 8 shows, the harvest from the special summer season is consistently around 1,000 birds per year and remains a small but significant proportion of the total annual harvest.

Manipulating the harvest is complicated by the need to set the special season regulations more than a year in advance, however it is recommended that the Council retain the current special season conditions. With population numbers in Areas A and B at the lower end of abundance, any additional harvest from a special season is not supported in those areas. Any impacts from aggregations of birds are best managed by working directly with the impacted landowners.

In respect of the special season in Area C, the Council resolved to extend the 2023 season to 3 weekends including Taranaki anniversary day (total 7 days). The 2024 dates are already set in the 2023 Gazette Notice and are 24/25 February, 2/3 March and 9/10/11 March. In 2025, Taranaki Anniversary Day falls on Monday 10th March, so the special season dates would remain aligned with the 2023 and 2024 dates. Including an extra weekend in 2023 resulted in the same hunting effort being spread out over a longer timeframe with a similar harvest. A 7-day season does allow for greater dispersal of paradise shelduck from moult sites and more hunter opportunity. Disturbance of mallards will occur a little closer to the main season, but the impact is unlikely to be significant.

On the basis that paradise shelduck populations generally appear stable, along with a moderate existing harvest, it is recommended that Council retain the status quo with an extension to the special season in Area C to include Taranaki Anniversary weekend. That is:

• A 10-bird daily limit for Areas A, B & C for an 8-week main season (as is also recommended for the Wellington F&G Region);

 A 3-weekend special season in Area C for 2025 including the last weekend in February and the first two weekends in March 2025, including Taranaki Anniversary Day.

Black Swan

In 2016 the daily bag limit for black swan (Kakïānau) was increased from 1 bird to 2. Most Taranaki hunters choose not to harvest swan and the increase allowed the few who do to take an extra bird for the table. The harvest has generally fluctuated between 20 and 300 swan, with 150 harvested in 2023 (Figure 10). The 2016 increase in the daily bag limit doesn't appear to have significantly increased the harvest, which remains small overall.

Counts of black swan undertaken in January 2023 were above the long-term average across Whanganui (377 cf an average of 338 swan), Waimarino (44 cf an average of 32 swan) and Taranaki (424 cf an average of 367 swan).

Black swan are relatively mobile and it is thought that a single population extends over central New Zealand, if not further afield. The January 2023 trend counts in Wellington, Nelson/Marlborough (including Farewell Spit) and Whanganui have all shown increases, especially Lake Wairarapa where the was an 83% increase on the 2022 counts (Figure 11).

On the basis that the Taranaki harvest is small, and that the counts are also relatively small, it is recommended that the status quo (2 bird daily limit for an 8-week season) remain. The Wellington Region is recommending a daily bag limit of 5 for swan across the entire region.

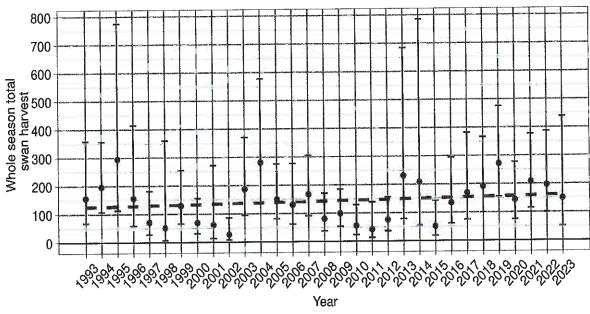


Figure 10. Estimated black swan harvest in the Taranaki Fish and Game region 1993 to 2023.

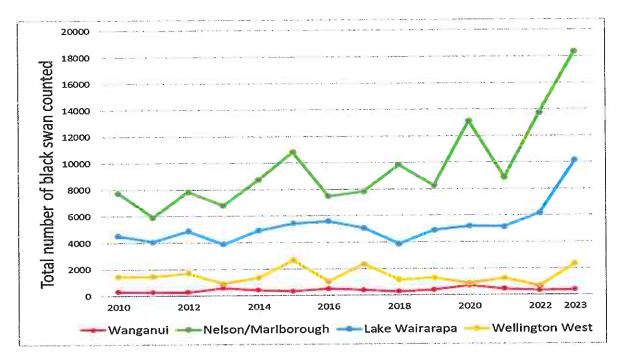


Figure 11. January black swan trend counts for the Taranaki, Wellington and Nelson/Marlborough regions 2010 to 2023.

Pūkeko

Early April counts of pükeko have been made along 17 randomly selected transects around the Taranaki ringplain since 2005, although no counts were undertaken in 2020 owing to the covid-19 lockdown. Total counts have varied between 91 and 336 birds, with an average of 178. The April 2023 count was 252 pükeko. The 18-year trend analysis (Figure 12) indicates that the population remains stable or slightly increasing, although birds are patchy in distribution, with greater numbers in the wetter north and central Taranaki areas.

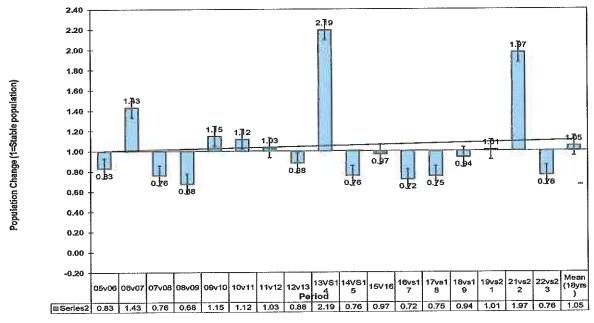


Figure 12. Route regression analysis of pūkeko counts along 17 randomly selected road transects around the Taranaki ringplain, 2005 to 2023.

Counts in Whanganui were restarted in 2023 for the first time since 2017 (counts had only been running from 2015 to 2017). These were also done in April and consisted of 10 randomly selected road transects between Waverley and Turakina. The total count in Whanganui was 122 which was the highest count so far. There is not yet enough data from Whanganui to conduct trend analysis.

During the 2022/23 year there were 41 permits issued to disturb pūkeko with 31 in urban areas and 10 in rural areas. The majority of these urban permits were issued for New Plymouth.

Harvest during the 2023 gamebird season had a substantial decrease from last year with an estimated 1,422 pūkeko harvested (Figure 13.) This is still above the long-term average harvest of 1,164 birds. Of the total number of birds shot, 42% of birds were harvested during the 2-month extended season (Figure 14).

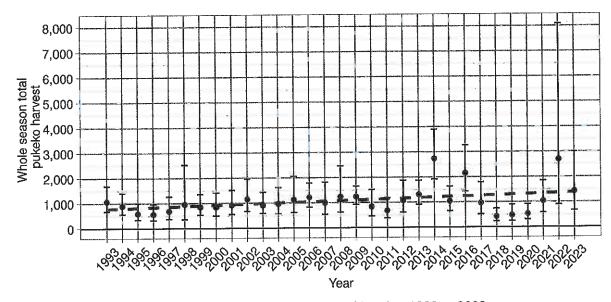


Figure 13. Estimated annual pükeko harvest in the Taranaki region 1993 to 2023.

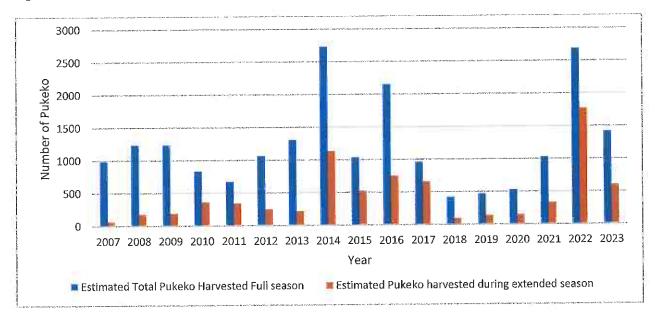


Figure 14. Estimated pūkeko harvest during the Taranaki full season and the proportion taken during the extended season using gamebird hunter survey results.

Area C currently has a 10-bird daily bag limit for pūkeko along with a 4-month season through to the last Sunday in August. The extended season enables hunters to target localised aggregations of pūkeko scattered over the ringplain and in problem areas around New Plymouth to address their impacts on agriculture and horticulture as well as to create additional hunting opportunity after the main duck season has ended. Past monitoring suggests that the Whanganui and Waimarino populations might struggle under this level of harvest if it was mis-directed, but in the case of the Taranaki ringplain population it appears that the harvest may be self-limiting. In other words, as the larger mobs are controlled, hunters may be less inclined to target pūkeko.

Given that monitoring indicates that pūkeko populations in Area C remain stable, it is recommended that Council continues with a 10-bird limit in Area C and a 5-bird limit in Areas A and B.

The Wellington Region is recommending a 5-bird limit for pūkeko with the same season length extension as Taranaki and their 5-bird limit aligns with that recommended for Whanganui and the Waimarino.

Pheasant

The harvest of pheasant in the 2023 season was estimated at 252 birds (Figure 15), which was down on last year and also below the long-term average of 393 birds. Although hunting hours were significantly lower than average in 2023 (553 hours of 1,784 average; Figure 16), the harvest rate of 0.46 pheasant/hour was double the average (Figure 17).

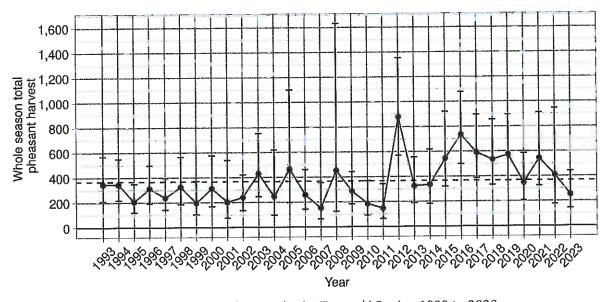


Figure 15. Estimated annual pheasant harvest in the Taranaki Region 1993 to 2023.

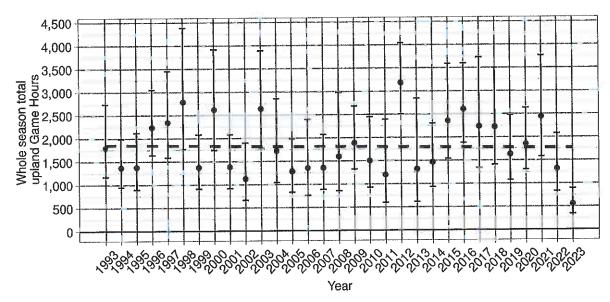


Figure 15. Estimated upland game hunting hours in the Taranaki Region 1993 to 2023.

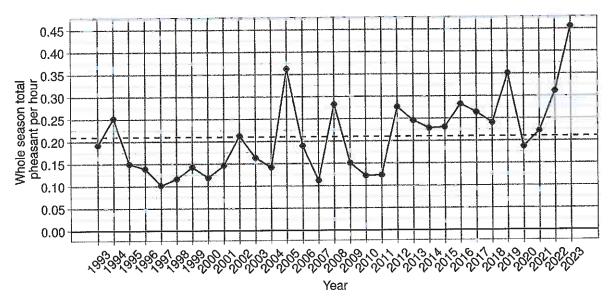


Figure 16. Harvest rate (birds per hour) of pheasant in the Taranaki Region 1993 to 2023.

While we do not have an estimate for the current size of the pheasant population, they have been very visible around much of the region in recent years. This may well reflect that large-scale predator control programmes and the planting of manuka, woodlots and riparian areas are potentially having a positive impact. As it is apparent that many populations still go largely un-hunted, the current level of effort and harvest suggests there is no need to further restrict the harvest, nor does there appear any justification to liberalise the regulations. Results of the gamebird hunter survey reported to Council in December 2018 indicate very strong support for the status quo of a 2-bird daily limit and four-month season. It is therefore recommended that these conditions be retained. The same conditions are being recommended for the Wellington Region.

California Quail

California quail are restricted in distribution with few substantial coveys remaining, though there has been comment that they are being seen more frequently, similar to the apparent increase in pheasant numbers. With such low numbers, hunters generally perceive hunting them as difficult and/or inappropriate. Harvest totals are small (an estimated 0 birds in 2023; Figure 17) and variable, which in part is an artefact of the hunter survey design and the fact that just a few hunters shoot quail.

Such low levels of harvest indicate that the daily bag limit of 5 is for the most part irrelevant, however it does allow hunters to make use of the opportunity provided by large coveys where these still exist. As such, it is recommended that the status quo of a 5-bird limit for a 4-month season remains. The same season length and bag limit is being recommended for the Wellington Region.

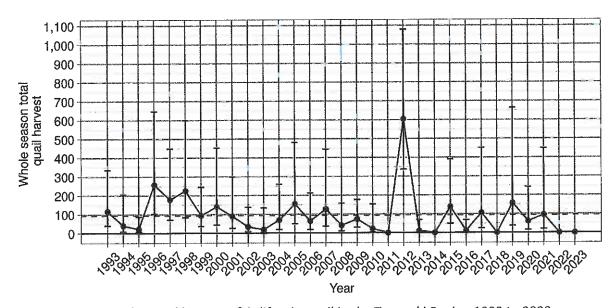


Figure 17. Estimated annual harvest of California quail in the Taranaki Region 1993 to 2023.

Bobwhite and Red-legged Partridge

Some backyard breeders have permits from the Department of Conservation to breed and release these species and there could also potentially be escapees from game preserves. The Council has therefore provided an opportunity for game bird hunters to harvest these species where they exist in the region.

Upland game property with special conditions

Robert Browning has applied for a *Gazette* listing for an upland game property with special conditions to enable syndicate (non-commercial) shoots for ring-necked pheasant on a property at 336A Kauarapaoa Road, Brunswick, Whanganui.

Summary of the proposal

- A Gazette listing is sought for a non-commercial upland game property run on a private syndicate model with 6 to 8 members;
- The Applicant has obtained a Wildlife Act Authority from DOC (97702-FAU) to obtain and release up to 1,000 captive-reared ring-necked pheasant annually for five years from 25th March 2022 (authority expires on 24th March 2027);
- The property of some 4,000 acres is located at 336A Kauarapaoa Rd, Brunswick, RD14, Whanganui. The Applicant has permission to use it for 5 years;
- Up to 500 birds will be purchased annually at 7 weeks old and on-grown in pens on the property until release;
- The property will operate during the gazetted season for pheasant (1st Saturday in May to last Sunday in August;
- The Applicant seeks to harvest over the usual gazetted limit of 2 birds per hunter per day, including hen pheasants;
- All shooters on the property will be licenced game bird hunters.

At its meeting of 30th March 2019, the Council considered a paper on upland game properties with special conditions and resolved to "support non-commercial upland game properties operated by families, private syndicates or friends to provide an immediate and guaranteed hunting opportunity".

Should Council approve this application, then the Game Gazette Notice listing can be based on regulations in place for such properties in the Auckland/Waikato Fish & Game Region (see draft Notice below).

RECOMMENDATIONS:

- 1. That Taranaki Fish & Game Council approves the bag limits and season conditions laid out in the following draft 2024/25 Game Gazette Notice, subject to changes made by prior resolution, for recommendation to the NZ Fish & Game Council.
- 2. That Taranaki Fish & Game Council approves the application for an upland game property with special conditions.

Allen Stancliff Senior Field Officer 23 November 2023

TARANAKI FISH AND GAME REGION1

1 Game That May be Hunted or Killed—Duration of 2024/2025 Season

Species	Season Duration (dates inclusive)	Daily Bag Limit	Hunting area
Grey/mallard duck	4 May to 30 June 2024	12	All areas
NZ shoveler duck	4 May to 30 June 2024	2	All areas
Paradise shelduck	4 May to 30 June 2024	10	All areas
	22 and 23 Feb 2025	10	Area C
	1 and 2 March 2025	10	Area C
	8 to 10 March 2025	10	Area C
Black swan	4 May to 30 June 2024	2	All areas
Pūkeko	4 May to 25 August 2024	5	Area A&B
	4 May to 25 August 2024	10	Area C
California quail	4 May to 25 August 2024	5	All areas
Cock pheasant	4 May to 25 August 2024	2	All areas
Bobwhite (Virginian) quail	4 May to 25 August 2024	5	All areas
Red legged partridge	4 May to 25 August 2024	2	All areas
Pheasant, both sexes	4 May to 25 August 2024	No limit	Upland game properties with special conditions in clause 6 for this Region.

2 Definition of Areas

- 2.1 Area A: That area within the following boundary commencing at Waiaruhe Road; then by that road, Owhakura Road, Whangaehu Valley Road and Fields Track to Kakatahi; then by straight lines to Pipiriki and Tawhata; then by Tawhata Road to the boundary; then by the generally eastern boundary of the region to Waiaruhe Road.
- **2.2** Area B: That area within the following boundary commencing at Waiaruhe Road; then by that road, Owhakura Road, Whangaehu Valley Road and Fields Track to Kakatahi; then by straight lines to Pipiriki and Makakaho Junction down the eastern bank of the Waitotara River to the sea; then by the sea coast and generally eastern boundary of the region to Waiaruhe Road.
- **2.3** Area C: The balance of the region contained by the westerly boundaries of Area A and B and the sea coast between the Mokau River and Waitotara River mouths.

¹Reference to Description: Gazette, No. 83, of 27 May 1990, at page 1861

3 Shooting Hours

6.30am to 6.15pm.

4 Decoy Limit

No limit.

5 Special Conditions

5.1 Special Paradise Shelduck Season

Area C only: For the Special Paradise Shelduck Season on 22 February, 23 February, 1 March, 2 March, 8 March, 9 March and 10 March 2025, the hours of hunting are extended 6.30am to 8.00pm. In addition, all hunters, including land occupiers, must hold a 2025 Taranaki Special Paradise Shelduck Season Hunting Permit that has been issued by the Taranaki Fish and Game Council (or authorised agent) to that named person.

- 5.2 No person shall hunt, as specified, within 100m of any urban sewage oxidation pond.
- 5.3 No person may wilfully leave on the hunting ground any game bird(s) shot or parts of any game birds shot.
- **5.4** No person may shoot game from a boat on the Whanganui River downstream of Kemps Pole (Kauarapaoa Stream confluence).
- 5.5 Any licensed game bird hunter who has a Department of Conservation permit to take or kill wildlife for the purpose of hawking may hunt with an Australasian Harrier (Circus approximans) to take gamebirds. This is subject to the season length and bag limit for each gamebird species in clause 1 of this notice for this region and subject to any conditions imposed by the Director-General of Conservation under such a permit.

6 Upland Game Properties with Special Conditions

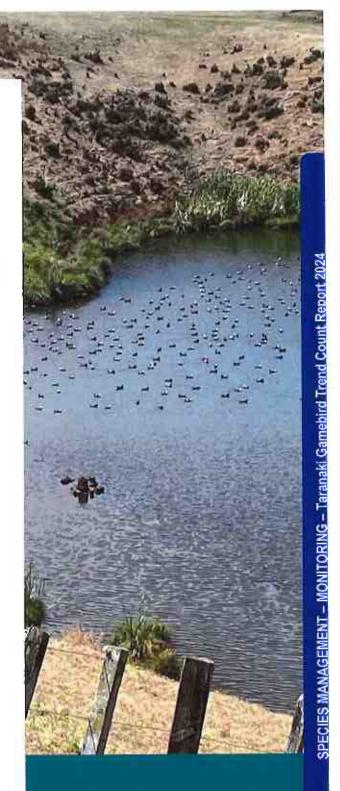
- 6.1 This clause applies to the following specified property only:
 Paetawa station. 366a Kauarapaoa Road Whanganui being lots1-2 DP 29356.
 Waipukurau SD. 1307.9440ha administered by Hienni investment Ltd.
- 6.2 Where hunting takes place in any specified property defined in this notice, no person shall have in that person's possession outside that specified property any game taken from that specified property, unless affixed to the game is a label with the name of the specified property where that game was taken or killed written legibly on it, and the additional words on the label, "for personal consumption, not for sale or profit" written legibly on it.
- **6.3** A person must not clip the wings of a bird released on any specified property after the bird is 8 weeks old.
- **6.4** A person must not clip the beak of any bird released on any specified property at any time.
- 6.5 A person must not hunt a pheasant before it is 18 weeks old.
- **6.6** A person must not hunt waterfowl on a specified property on the same day that a pheasant hunt takes place on that property.
- 6.7 The unlimited daily bag limit for the specified property shall only apply when at least 400 pheasants have been released on to that specified property within 5 months of the opening day of the season, otherwise the daily bag limit shall be 2 birds.

- **6.8** A property owner listed in subclause (1) or a lessee of that property owner must keep a register of:
- (a) the names and addresses of hunters and all other persons who take game from that property;
- (b) the number and type of birds taken by those persons;
- (c) the description of that person's role in the hunting and killing of game birds on that day.

Following from the 2024 Game Gazette Notice, this report presents the January 2024 trend count information for Paradise Shelduck and Black Swan within the Taranaki region.

The findings of this report are discussed and compared with historical data as a contribution towards a wider understanding of Shelduck and Swan populations throughout the region.

Allen Stancliff
Senior Fish and Game Officer
Taranaki Fish and Game Council
October 2024



TARANAKI FISH AND GAME COUNCIL

The Chairman
Taranaki Fish and Game Council

2024 GAMEBIRD TREND COUNT REPORT

This report presents the January 2024 trend count information for paradise shelduck and black swan. The Council made recommendations on the draft 2024/25 Game Gazette Notice at its meeting on 9^{th} December 2023. As the final deadline for provision of regulation details to the NZ Fish & Game Council has passed (26^{th} January 2024), this report is for the Council's information only.

PARADISE SHELDUCK

WAIMARINO (AREA A)

Count information for paradise shelduck was obtained from 14 Waimarino moult sites in early January 2024, compared with 16 in the previous year (Appendix 1, Table 1). Counts from three of the sites (Browns, Manson Estate and Mokonui) were estimates by the landowner but thought to be reasonably accurate. The owners of Makakahi Lodge could not be contacted, so no count was done there. The count at Lake Otamaraha was obtained from the Wellington F&G aerial flight. The other 10 sites were visited on the ground. Photos have still to be reviewed to confirm counts at the larger sites, but the 2024 count of 2,849 paradise shelduck confirms that the Waimarino population remains at the "low end" of its historical range of abundance. The average number of paradise shelduck per moult site in 2024 was 204, which was only a little lower than in 2023 (213 birds).

WHANGANUI (AREA B)

Paradise shelduck were counted at 10 Whanganui coastal and hill country moult sites in January 2024, the same as in 2023 and including Lakes Oturi, Waiau and Maumahaki located in Area C just north of the Waitotara River (Appendix 1, Table 2). The accuracy of the count at Lake Westmere is questionable, as the growth of vegetation obscures a clear view of the lake — definitely one for use of the drone next year. The overall count of 1,566 birds was lower than in 2023 (1,784) and confirms that the Whanganui paradise population also remains the "low end" of its historical range of abundance.

WAITOTARA RIVER CATCHMENT (AREA B&C)

Counts were not undertaken in the upper Waitotara River catchment this year owing to time constraints.

TARANAKI PROVINCE (AREA C)

Counts of paradise shelduck were undertaken at 39 sites compared with 44 in 2023 (Appendix 1, Table 4). This included sites in the Taranaki eastern hill country, ringplain and coastal areas as far north as Mohakatino and as far south as Manutahi. Only one "significant" site was not counted (Huiroa – Akama Road) owing to the available time and pressure of other work.

The Waingongoro Road site count went from 1,160 to zero as the dairy farmer had had enough of the birds and obtained a permit and a gas gun in December 2023. It looks as though at least some of the birds went to the Eltham oxy ponds, as the count there went from 580 to 1,000.

The landowner at the upper Egmont Road site (count 600) has also had enough of the damage to his dairy pasture and has requested a gas gun. A similar situation exists at the Manutahi Road site. Kaponga oxy pond is also a disturbed site (gas gun). Wiremu Station may also be a disturbed site this year (count decreasing from 1,300 to 575), as the farm manager commented that there were a lot of birds and there was evidence of recent activity on the dam, with one reasonably fresh 12g casing found. There were many fewer "fliers" present, which also indicates disturbance. Low water levels also reduced bird numbers at some sites (e.g. Komene Lagoon).

Nevertheless, a total of 12,569 paradise were counted, which is 8% down on last year's count of 13,663 and still above the long-term (2008 - 2024) average of 11,905 birds. Sites on the ringplain bounded by Hawera, Eltham, Stratford, Inglewood and Waitara held the bulk of the moulting population, with sites in the eastern hill country holding only moderate numbers. As this is almost exclusively dairying country where the impacts of moult aggregations can be significant, it remains important to continue liaison with landowners and to be responsive to their concerns.

Overall, the population remains towards the high end of abundance and given the number of permits issued to farmers to disturb paradise shelduck causing damage to pasture and crops in Area C (17 so far in 2023/24), a summer hunting season to disperse birds after the moult remains a useful tool.

BLACK SWAN

WANGANUI - WAVERLEY COASTAL STRIP

A total of 563 black swan were counted during a ground survey of 11 dune lakes in the Whanganui to Waverley coastal strip in January 2024 (Appendix 2, Table 5). This was more than the count in 2023 (377 birds) and well above the long-term (32-year) average of 344 birds. The increase was due to an increase in numbers at Lakes Kaitoke and Marahau.

WAIMARINO - WANGANUI HILL COUNTRY

A total of 45 black swan were counted at 8 sites visited in the Waimarino, which was similar to the number counted in 2023 (44 swan) and above the long term (17-year) average of 33 birds (Appendix 2, Table 6).

NORTH AND SOUTH TARANAKI

A total of 490 black swan were counted at 24 sites in the Taranaki area during January 2024 (Appendix 2, Table 7). This was more than the 424 swan counted in 2023 and above the long-term (2007 – 2024) average of 374 swan.

CENTRAL NEW ZEALAND

Black swan are relatively mobile and it is thought that a single population extends over central New Zealand, if not further afield. The January 2024 count from Lake Wairarapa decreased by nearly 4,000 birds back to levels seen in 2022 (Figure 1). Counts in Wellington west remain stable at a relatively high level. The Nelson/Marlborough count is not yet complete with the Wairau Lagoons still to come but it is also likely to be a decrease from the high levels seen in 2023. Counts are still well above average when compared with the full record of monitoring (1977 – 2024).

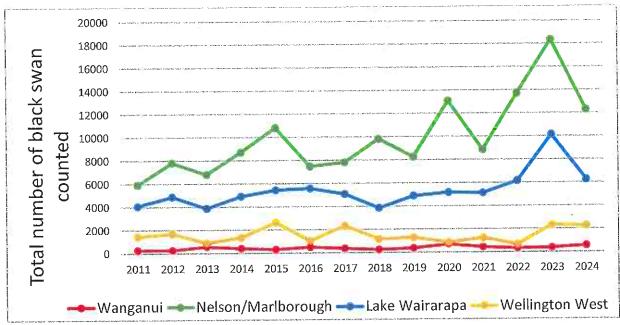


FIGURE 1. Central NZ trend counts for black swan, 2011 - 2024.

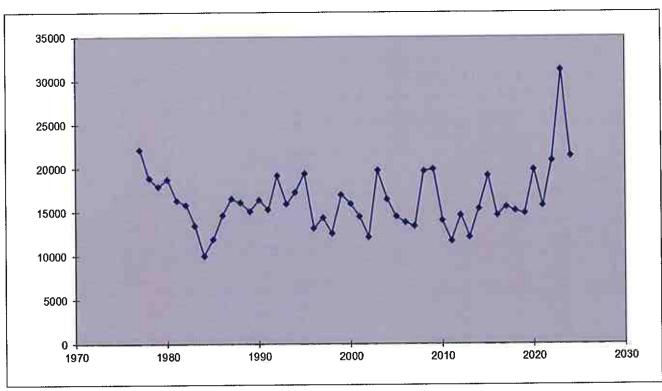


FIGURE 2. Central NZ trend counts for black swan, 1977 - 2024.

TARANAKI FISH AND GAME REGION1

1 Game That May be Hunted or Killed—Duration of 2024/2025 Season

Species	Season Duration	Daily Bag Limit	Hunting area
	(dates inclusive)		1
Grey/mallard duck	4 May to 30 June 2024	12	All areas
NZ shoveler duck	4 May to 30 June 2024	2	All areas
Paradise shelduck	4 May to 30 June 2024	10	All areas
	22 and 23 Feb 2025	10	Area C
	1 and 2 March 2025	10	Area C
	8 to 10 March 2025	10	Area C
Black swan	4 May to 30 June 2024	2	All areas
Pūkeko	4 May to 25 August 2024	5	Area A&B
	4 May to 25 August 2024	10	Area C
California quail	4 May to 25 August 2024	5	All areas
Cock pheasant	4 May to 25 August 2024	2	All areas
Bobwhite (Virginian) quail	4 May to 25 August 2024	5	All areas
Red legged partridge	4 May to 25 August 2024	2	All areas
Pheasant, both sexes	4 May to 25 August 2024	No limit	Upland game properties with special conditions in clause 6 for this Region.

2 Definition of Areas

- **2.1** Area A: That area within the following boundary commencing at Waiaruhe Road; then by that road, Owhakura Road, Whangaehu Valley Road and Fields Track to Kakatahi; then by straight lines to Pipiriki and Tawhata; then by Tawhata Road to the boundary; then by the generally eastern boundary of the region to Waiaruhe Road.
- **2.2 Area B**: That area within the following boundary commencing at Waiaruhe Road; then by that road, Owhakura Road, Whangaehu Valley Road and Fields Track to Kakatahi; then by straight lines to Pipiriki and Makakaho Junction down the eastern bank of the Waitotara River to the sea; then by the sea coast and generally eastern boundary of the region to Waiaruhe Road.
- **2.3** Area C: The balance of the region contained by the westerly boundaries of Area A and B and the sea coast between the Mokau River and Waitotara River mouths.

3 Shooting Hours

¹Reference to Description: Gazette, No. 83, of 27 May 1990, at page 1861

6.30am to 6.15pm.

4 Decoy Limit

No limit.

5 Special Conditions

5.1 Special Paradise Shelduck Season

Area C only: For the Special Paradise Shelduck Season on 22 February, 23 February, 1 March, 2 March, 8 March, 9 March and 10 March 2025, the hours of hunting are extended 6.30am to 8.00pm. In addition, all hunters, including land occupiers, must hold a 2025 Taranaki Special Paradise Shelduck Season Hunting Permit that has been issued by the Taranaki Fish and Game Council (or authorised agent) to that named person.

- 5.2 No person shall hunt, as specified, within 100m of any urban sewage oxidation pond.
- 5.3 No person may wilfully leave on the hunting ground any game bird(s) shot or parts of any game birds shot.
- 5.4 No person may shoot game from a boat on the Whanganui River downstream of Kemps Pole (Kauarapaoa Stream confluence).
- 5.5 Any licensed game bird hunter who has a Department of Conservation permit to take or kill wildlife for the purpose of hawking may hunt with an Australasian Harrier (*Circus approximans*) to take gamebirds. This is subject to the season length and bag limit for each gamebird species in clause 1 of this notice for this region and subject to any conditions imposed by the Director-General of Conservation under such a permit.

6 Upland Game Properties with Special Conditions

- 6.1 This clause applies to the following specified property only: Paetawa station. 366a Kauarapaoa Road Whanganui being lots1-2 DP 29356. Waipukurau SD. 1307.9440ha administered by Hienni investment Ltd.
- 6.2 Where hunting takes place in any specified property defined in this notice, no person shall have in that person's possession outside that specified property any game taken from that specified property, unless affixed to the game is a label with the name of the specified property where that game was taken or killed written legibly on it, and the additional words on the label, "for personal consumption, not for sale or profit" written legibly on it.
- 6.3 A person must not clip the wings of a bird released on any specified property after the bird is 8 weeks old.
- **6.4** A person must not clip the beak of any bird released on any specified property at any time.
- 6.5 A person must not hunt a pheasant before it is 18 weeks old.
- **6.6** A person must not hunt waterfowl on a specified property on the same day that a pheasant hunt takes place on that property.
- 6.7 The unlimited mixed sex daily bag limit for the specified property shall only apply when at least 400 pheasants have been released on to that specified property within 5 months of the opening day of the season, otherwise the daily bag limit shall be 2 cock pheasants.
- **6.8** A property owner listed in subclause (1) or a lessee of that property owner must keep a register of:
- (a) the names and addresses of hunters and all other persons who take game from that property;
- (b) the number and type of birds taken by those persons;

(c) the description of that person's role in the hunting and killing of game birds on that day.

RECOMMENDATIONS:

• THAT THE 2024 GAMEBIRD TREND COUNT REPORT BE RECEIVED.

Allen Stancliff 30 January 2024

PARADISE SHELDUCK APPENDIX 1.

2024		90			145	45		520			75		-		122	750	42	30			215			25		ı		214	9009	9	4.00
2023	18	42			255	63		155			102		l.		181	970	290	75			8			32			128	705	353	32	
2022		316	W.			111		132			222				135	840	223	102			16			20			117	416	411	99	
2021		450		0		275		300			300				294	2400	220	23		က	0			20	0	00	134	580	800	90	
2020		380		0		315		420			142				240	1800	398	96		16	21			185	0	24	164	331	099	40	
2019	10	41	18	0		243		450			202	279	121		95	2200	40	400		თ	55			244	0	က	198	823	200		
2018	15	150	27	2	0	192		310	119	0	295	117	47		171	1670	230	141		0	20		0	231	0	09	178	562	297		
2017	20	300	2	150		06		132	150	17	28	147	80		209	1450	24	161	39	48	72		10	92	0	09	234	420	330		
2016	35	230	7	101	*0	34	100	210	116	0	34	127	125		665	1225	24	103	38	198	225		7	191	89	55	284	735	144		
2015	0	265	4	-	*0	103		7	153	e	73	93	167		442	1200		196	85	59	206		12	501	31			331	336		
2014	0	102	3		316	186		264	144	40	309	135	167	0	376	1254		213	72	0	256		0	545	119			446	340		
2013	0	463	-		143	357		0		310	228	518	160	0	348	1038		201	71	193	278	0		702	107			412	670		
2012		319	က		64	287		205		348	83	440	239	0	533	785		301	111	152	441	0		611	96			678	560		
2011	0	358	15		48*	309		48*	206	286	150	494	218	0	469	824		235	96	187	357	4		683	77			532	641		
2010	0	378	18	0	66	250	0	167	270	383		385	249	0	512	1102	0	350	118	243	613	0	0	756	16						
2009	0	423	15	0	67	123	0	176	312	302	0	432	265	0	386	457	0	318	92	45	235		0	420	4			463	134		
2008	0	363	43	0	289	460		298	331	411	161	353	223	0	590	957	45	9	69	195	550	0		20	120			785	422		
2007	0	435	42	0	125	428		410	372	495	252	630	342	0	525	1100	12	27	122	142	775	10		0				903	585		
2006	12	944	21	0	48	477		*226	280	1181	269	675	294	0	875	2000	0	32	155	180	560	72	100	27				748	112		
2002	e	1320	99	13	99	530		444	210	780	82	1222	314		266	1884	143	20	82	2	550			213				478	189		
2004		320	တ		200	200		395	540	620	110	500	400	0	540		120	150	20	0	400			200		7		293	190	- (
2003		114	342	0	273	561	220	390	1446	703	293	527	369	50	730	986	372	360	119	195								664	402		
2002 2003		280	510	0	640	360	270	520	870			640	440					Ш					i					730	400		
2001		1700	740	∞	750	1300	410	310	006	580		1280	35															625	360		_
2000		717	900	12	270	1062	380	650	688			814	415															642	370		
1999		1875		240	710	880	360	480	964			600	362															604	340		
1998	0	2210		200	1043	1068	676	250	009			850	344															168	490		1
8661 2661	0	1800		0	800	1300	400	850				750	340				7											1000			
	20	1500		342	1000	1348	375	700				38	180															1000			
9661 5661	70	1592		657	631	1020				Ž		370	248															1114			-
1994		2203		214	1542	786						605	250															800			
1993 1		1974		380	1931	420						1000	150															200			
1992		1230		911	1410	350				Į.		430	250					Ş													-
Site 1	Pritts	Browns	Mokanui	Tohunga	Roke	Sue	Punch	Ox Ponds Raetihi	Omerei (2)+	Fields Track	Harris	Taonui	Aranui	Ohakune Lake	Ohakune Oxy Pnd	Nat Park Oxy Pnd	Tanupara 1	Tanupara 2	Papahau (2)	Ohorea	Lake Otamaraha#	Lahar Lake	Ruatiti Flats	Manson Estate	Kaahu Estate	Blue duck lodge	Makakahi Iodge	Morikau (2)	Mokanui	SH4 Kakatahi	Lancacana

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TABLE 2

IABLE 2. Paradise shelduck trend counts in Whanganui (Area B)	U 以 以 以	. Fa	radis	e sh	Planc	KTE	ind c	ount	SIII	W II AI	1gan	¥) ∏	rear	3						H														
Site	1990	1991	1992	1993	1994	1995	1996	1997	1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001	6661	2000	2001	2002	2002 2003 2004		2005 2	2006 2	2007	2008 2(2009 20	2010 20	2011 20	2012 20	2013 2014	14 2015	15 2016	16 2017	7 2018	8 2019	9 2020	0 2021	1 2022	2023	2024
L Marahau	006	500		822	536	433	782	1600	1205	1105	1284	610 1	1740	5 886	910	731 6	1 919	1115 8	884 3	313 28	287 241	<u> </u>	399 299	9 254	4 328	8 186	6 192	552	237	7 493	330	199	341	288
L Waikato											310	850	0	521	315 4	436 1.	1351 4	490 6	625 5	574 98	982 67	673 74	749 721	1 562	2 721	1 771	1 490	358	391	515	420	45	132	135
Maewa	009	550	905	494	1144	1149	850	1700	1200	794	1377	1250	630 1	1115	8 509	870 1	1177 4	420 5	523 3'	371 6	616 48	489 47	473 397	7 227	7 28	3 71	6	0	16	0				
L Waipu	700	300		874	647	835	692	710	964	215	742	250	09	128	370 1	175 1	173 3	394 5	575 33	326 28	287 251		438 531	1070	70 2430	30 1255	55 1200	086 0	920	470	029	631	338	325
L. Rotokauwau													300	0	330 1	134 3	334 2	222 4	420 1.	178 6	654 68	685 12	127* 576	6 432	2 151	1 147	7 130	300) 24	19	4	9	90	43
L. Kohata															7	46	4		10	4	23 1	13 (0 0	0	4	0	_	1						
L. Kaitoke															, 1	238 5	575 2	275 3	330 47	424 7	763 71	710 10	1024 1101	01 943	3 962	2 1140	10 650	0 153	3 720	562	730	483	290	325
Arranmore																	F				-			-				_		52	149	160	203	220
L. Westmere											111					11	204	4	420 1	129 3	342 26	268 58	586 257	535	5 547	7 594	4 515	5 402	522	428	545	337	328	190
L. Pauri														0					20	8 2	27 3	35 2	20 0	0	0	0	0	0	0	0	_~			
L. Grassmere																			0	12	0 1	17 8	8 23	3 2						L				
Lake Oturi+										i v				Ì	445	250	185 5	530 4	485 3	380 3	376 32	321 37	370 289	39 240	0 212	2 93	3 137	7 293	3 71	14	31	39	12	10
Lake Waiau+																210	56 1	196 2	210 1	195	130 7	74 1	110 93	3 100	00 170	70 172	2 31	∞	2	m	28	30	0	0
L Maumahaki												V.				45	120	09		9 02	8 59	82 17	170 245	9 51	0 10	0 41	1 33	39	20	35	40	20	06	30
TOTAL											4725	3945	3860	4725 3945 3860 3818 3458		3810 5	5655 5	5190 5	5709 35	3581 45	4552 50	5032 57	5712 56	5614 5209	09 6230	30 5349	49 4137	3945	5 2923	3 2591	1 2948	3 2418	1784	1566
				1		1	1	1	1			1		-	-																			

* disturbed site +Sites in Area C

Paradise shelduck trend counts in the upper Waitotara catchment (Area C) TARIES

IABLE 3: I alaulist subjudge uping up upon Hanoland salenge (1 mod s	いったさい	ジュ	3 11	מחווי	1111	7	7	14 01	TOTAL	777	1	7	1													
Site Name	1998	1999	2000	2001	2002	, 2003	2004	2005	2006	2007	2008	2009 2	20102	011 2	2012 2	013 2	014 20	115 20	116 20	1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024	18 201	9 202	0 202	1 202	2 202	3 2024
TLB Makakaho Rd	635	220	150	635 220 150 640 310 979 797 1029 770 730	310	979	797	1029	770	730			508 431 525 106	431	525	106						1	0	0 141	122	24
"Kidney pond"		260	470	260 470 60 370	370	08																Ω̈́	Dry Dry	0 /	22	
"Bush pond"		90	20	10															-			430	430 285	0	19	V.
Ponds at top of Makakaho Rd		9	0																			0	6	7	12	
TRB Makakaho Rd	0	83	425	83 425 360 420 214 420	1 42() 214	420		389	409 389 269			294 68 27	89	-	2.7					=\(31	31 100	31	7	
Makakahi Road Lower																					-			26	12	
TOTAL	635	629	1065	635 659 1065 1070 1100 1273 1217 1438 1159 999	11100	1273	1217	1438	1159	666			802 499 552	499	552	133					J.	46	462 394 200 194	1 20(194	

-- no count in 2008 & 2009

Paradise shelduck trend counts in the Taranaki province (Area C). TARIF 4

TABLE 4. Paradise shelduck trend counts in the Taranaki province	lise s.	held	uck	trend	con	ints 1	n the	Tar	anaki	prov	/ince	∽ ,	Area C).		1000	0000	000	0.00			00	100	100	204	2010	0100		1000 0000	, ,,,,,	2002	2004
POND LOCATION	1992	1993	1994	1995	986	1,661	1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003	7777 21	07 000	U1 200	12 200	-	2004 2005	7006 2007	7007	7 2007	7 6002	2008 2009 2010 2011	VII 24	7707	7073 70	707 +107	0107 5107	0 4017	7079	4018 4019			77077		470
Waitara River	135	355	350	25	450	260 4	425 3	330 6	600 234	14	124	380	370	740	912	577 8	815	644	757 4	477 6	608 11	1154 1000	00 1007	7 615	100	240	345	103	468	434	135
Waitara River (Purangi)	75		150										70	86	233	307	400	302 2	287 2	249 3	365 36	366 368	58 580	0 712	283	347	380	400	372	383	243
TRB Waitara River			175			80	100	55 6	62 1	10	0					150					_										
Huiroa Ponds	099	360	380	320	150	230	20 2	297 2	295 3	30	65	70	89	30	30	105	80	30	70 5	52 1	17 2	20 32	2 6	7	15	23					
Whangamomona		70	85	160	75		35 5	55 5	57 7.	73	10	62	06	155	38	76	202	180 1	1 061	55 2	210 19	199 32	2 55	31	19	20	20	17	11	.0	4
Huiroa						390	850 5	550	8 75	750 680	0 920	505	790	770	930	380	517	680 4	490 4	20	516 56	560 240	10 dry	y 0	0	205	195	260	45	195	
Huiakama																	130	9	82 I	102 1	119 2	25 115	15 240	0 214	71	15	9	15	10	7	
Tahora	360	240	195	50	115		195	90 1	115 26	266	30	330	270	156	125	0	100	133	5 89	. 66	7 5	53 39	99 6	176	130	210	302	455	294	455	572
K1 Tahora		30	125	0	370	250	290 3	340 1	190 16	160 324	4 450	009 (290	530	530	465	415	260	5 2	20 4	47 4	4 78	8 230	0 300	233	410	153	55	105	105	33
K2 Tahora										_				85	136	120	27	55 1	110	101	17 9	93 102	137	7 177	23	9	15	41	-	2	
Rimuputa Rd Tahora		1							H										145 4	4*	170 1	12		250	32	0	3	5	210	181	71
Moki Road Tahora											ļ											78	787 430	6 0	137	278	700	750	260	365	312
Mt. Damper	520	125	180		85	50	0	40	06	0	0			30	150	250	150	150 1	100 2	250 1	150 20	200 300	0 250	0 300	300	250	250				
Boar Road	520	155	520	200	450	250	780 6	675 6	610 55	550 660	0 714	\$ 635	520	715	580	089	800	607 2	217 1	183	196 1	140 126	26 151	1 94	37	35	0	2	11		
Waitaanga		120	0		25	35	35	0 1	170 15	154	30			22	12					-			80	100	(
Lower Mohakatino Estuary (SH3)					- 1	-		=	100 13	130 170	177 0.	7 202	300	250	250	186	320	243 1	194 1	165 2	253 20	263 302	70 406	9 441	301	313	104	234	215	18	181
Lwr. Mangaehu River				255			645 6	670 5	530 70	700 500	0 504	1 585	575	715	435	220	254	448	∞	819 6	613 11	1100 913	13 884	4 605	595	490	472	727	209	374	992
Upr. Mangaehu River												Ш							2	245 4	40 2	20 30	0	55	70						
Lake Cowley (Waitara)	800	300	280	200	470	530	210 1	180 5	590 5	530 1000	00 820	0001	750	480	340	340	026	8 079	800 7	720 6	645 6	650 178	78 315	5 188	390	266	300	570	950	1180	086
Lake Ratapiko	0	70	0	0	0	0	80	10	0 0	0	0	0	0	0	0	0	0	0		0	0	0 0	0 0	0	0	0	_	0			
Tariki Road			150	300	20	13	0	50	90 3	35 13	3	55	0	0	0	0	57	4	59 4	41 2	29 2	20 7	0 0	4	0	0	0	0			
Croydon Rd JT		300	50	0		18	40	2 4	40 3	38 38	0	0	3	0	0	0	0	10	20		0	0 5	2 0						ı		
Croydon Road				ļ			-				10	0	0	15	21	0	0	0	0	12	0	0 10	10 14	15	14	0	0				
Wiremu Station (Opunake)	1150	800	700	1400	910	1650 1	1640 13	1300 1500		920 650	0 780	0 1100	1000	1000	1340	1075 1	1300 1	640	1150 11	1140 9	950 12	1250 10	000 700	0 1000	008 0	1000	1434	1300	1300	1300	575
Saunder's Road	270	230	300	300	430		3.																-								
Corbett Lake (Saunders Rd Okato)	_		20	Ţ	6	190	270 3	300 4	450 38	385 700	00 200	200	650	295	295	99	300	275	335 4	405 1	185 20	260 29	295 500	0 270	210	460	470	575	330	250	490
Oxford Road Lake														315	395	534	510	702 4	400*	10 2	260 2	240 57	7	13	73	17	47	75	4	7	0
SH45 Omata			16	6	1	0	0	0	9 2	20 20	0 92	0	27	170	0	т	5	7	-	7	0	0	9	0	0	0	0				1
Barrett Lagoon (New Plymouth)	0	100	99	350	430	610	550 6	620 7	700 6	650 340	.0 300	009 0	615	570	703	450	969	827	581 6	640 5	587 8;	826 67	670 640	0 950	335	620		\rightarrow	\rightarrow	-	850
Umutekai Road		270	250	475	300	500	640 5	520 6	9 009	600 500	0 400	0 480	450	420	420	380	545	450 4	400 5	580 7	735 5	550 48	480 555	5 470	-	650	-			1061	800
Alfred Road	450	800	550	550	300	226	263 1	157 2	277 12	126 194	305	5 380	305	490	638	730	810	487 (989	622 5	9 069	600 45	450 330	0 400	205	420	400	90	20	-	34
upper Egmont Road					70	180	28	30 8	85 10	160 200	9 00	2	3	0			i		1	105 2	285 3	360 38	385 270	0 330	370	178	425	550	800	200	009
Richmond Rd.				50	110	72	31	5 2	45 5	50 180	385	5 350	490	475	620	875	770	775 4	450 4	420 4	411 4	435 28	285 407	7 450	024	114	220	270	128	06	220
Upper Newall Road	7					190	06	30	0	0	1	0	7	0	0	dry							-		_						
Punehu							0	70	54 3	36 8	15	4	3	19	0	7	0	7	38	09	3 1	15 5	5 5	0	62	0	0	0		_	45
Hawera oxidation ponds (2)							20	70	95 12	122 190	00 200	0 260	260	274	320	415	450	394 4	421 4	483 3	\rightarrow	460 48	485 490	0 350	475	-		\rightarrow			380
Waingongoro Road									ę	60 23	3 2	55	210	470	365	90	0		10	33 2	204 2	285 19	195 600	0 40	470	750	733	650	1200	1160	0
									-																						

Paradise shelduck trend counts in the Taranaki province (Area C). TABLE 4 (Continued).

1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008	12 0 25 0 0 0 1 3	0 0 0 18 0 0 2 5 8 2	165 0 26 7 16 0	40 30 30	9 18 2	375 300 450 564 617	40 70 7 7 0	300 415 472 430	100 450 59 45	0 0 0 0 0 0 0 0 0 0 0 0	Winstones Manutahi Road 145			Inglewood Oxidation ponds 0 0 0 0 0 0 0 0															
2008 2009 2010 2011 2012	7 1 1	5 1 3	0 7 0	30	19 0 1	900 1020		450 170	25 200	0 0	2 7	135 220 27		5 5 4															
2013	0 0 1	10 7	0 0 0	0 0 60 2	1 14 (950 1123 1000 10		47 300 135 6	130 145 360 50	0 0 0	8 23 83 6	279 344 350 33	175 275 4	4 1 135 2	36 6		0 0												
2014 2015 201	0 1 0	5 5 5	0 0 0	25 20	0 7	1050 1100 1240		62 47 2	506 265 220	0 0 0	6* 128 180	320 440 385	434 220 300	252 160 270	62 30 31	93 0	91												
2016 2017 2018	0 8	0 9	0	0	7	1400 1180		120 dry	0 204 180	40 2	0 150 100	5 400 470	0 354 46	0 297 217	103 180	0 0	5 20 49	158											
2019 2020 2021 2022	11 0	0	0 0		0 49 50	1470 1769 1400		75 20 0	45 130 170	0 82 0	295 365 360	635 770 600	175 340 dry	573 220 700	340 586 560	0	87 149 78	260 79 217	008 300	43 73 17	290 366	31	16						
_					21	1300		320	100	50	137	200	y	480	510		112	210	226	115	0	0 1	350					36	
2023					6	753 1200		2	195 330	0 0	289 437	780 770		950 770	580 1000		103 116	212 246	350 152	95 79	0 *0	0	350 55	11 0	66 118	18 3	14 0	20 0	

APPENDIX 2. BLACK SWAN

TABLE 5. Black swan trend counts in the Wanganui - Waverley coastal strip.

	2024	∞	81				10	281	0	0	102	4	12	0	65			563
	2023 2024	0	83			4		115	2	9	6	54	4	18	82			377
I		9	110					106	7	2	37	16	3	0	30			317
ı	2021	00	50		0	0	11	153	1	8	18	51	26	0	134			449
Ì	2020	117	21		0	0		405	3	8	13	5	31	36	44			683
	6102	30	15		0	0	Į.	213	5		41	0	2	0	75			381
	2018	22	6		0	14	32	48	11] post	0	89	27	14			256
	2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022	27	4		0	7	7	214	13		18	7	4	0	16		n	380
	2016	11	12		9	4		271	20		15	∞	6	0	117			510
	2015	55	2		0	4	9	98	31		13	9	5	9	95			308
	2014	135	13	1	0	32	10	40	16		30	9	10	9	102			411
1	2013	32	∞	0	0	∞	7	360	37		16	4	0	0	95		.,	562
	2012	10	38	parel	0	46	7	43	S		41	1	0	0	70			268
	2006 2007 2008 2009 2010 2011	4	ω.	1	0	7	∞	25	22		47	2	∞	0	131			261
	2010	П	41	0	0	14	12	74	9		38	∞	0	0	107			301
	2009	3	74	00	ш	2	18	24	5		28	3	0	0	119			285
	2008	40	51		4	4	48	15	4		33	0	4	0	114	6	0	335
	2007	10	20		0	14	2	140	4	Ì	4	7	4	0	170	17	I	423
	2006	09	20		0	57	16	31	00		26	46	9	7	94	∞	2	406
ai suip	004 2005	118	16		0	0	6	52	9		64	0	8	11	26	9	1	323
astal	2004	47	25		0	0	4	69	S		99	6	7	0	57	13		290
S	2003	14	29		4	32	00	56	12		20	23	0	41	0	4		243
VCI IC	2002					I												224
Wa	2001	35	9		0	10	0	175	9	M	50	10	0	4	20	7		323
mı -	2000	82	14	1	0	10	4	30	2		42	6	0	35	45	26		300
anga	1999	10	12	7	0	27	0	21	-		116	13	47	4	1	80		340
N N	1998	33	11	0	0	0	0	105	0		∞	5	11	40	95	19		327
ומן רמ	1997	20	38	18	,i	14	5	19	9		14	9	36	25	32	∞		242
CITICS	1996	17	S	0	0	10	0	24	0		36	0	25	0	0	15		132
3	1995	6	'n	0	0	13	∞	24	14		39	10	ю	22	45	~		199
II CII	1994	37	25	0	10		7	36	L		40	9	1	~	119	5		299
wan	1993	74	5	11	0	92		25			70	20	10	Ξ	33			326
ack :	1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 20	17	09	13	0	92		48			19	7	16	3	125			385
0.	1991	70	Ŋ	2	0	22		85	20		35	15	S	0	85	_		294
IABLE 3. Black Swall field coulds in the wangaliul - waverley coast	Name	Waipu	Rotokauwau	Grassmere	Wiritoa	Pauri	Kohata	Kaitoke	Westmere	Arranmore	Marahan	Waikato	Waiau	Herengawe	Oturi	Hawkins	Okoia	TOTAL

TABLE 6. Black swan trend counts in Waimarino and Whanganui hill country sites.

Site	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Browns	4	9	2	0	2	3	4	3	0	0	5	3	4	1	0	0	0	0
Roke	13	12	14	3	5	1	4	000	0	0							16	15
Ohakune Oxy Pond	2	2	0	0	0	0	0	2	S	0	0	0		1	2	5	6	I
Raetihi Oxy Ponds (2)	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Morikau (3)	61	12	0		2	4	9	9		6	9	6	∞	13	16	8	5	9
Mokanui	9	5	0		3	1	0	9	8	∞	9	7	14	12	5	1	3	
Taonui	9	5	0	0	2	0	0	0	0	0	0	3	\$					
Harris	8	9	7			0	0	9	5	ψ.	3	1	6	8	5	2	0	9
Old Fields Track		1	0	1	0	0	0	0	0	0	1	0						
Kaahu Estate		2	0	0	4	0	0	7	0	0	3	3		0	0			
Lake Otamaraha		10	1	3	3	2	12	7	0	1	0	9	0	4	0	0	4	
Sues								2	1		0	4	3	4	2	1	5	17
National Park Oxy Pnd								4	0	0	0	0	0	0	0	0	0	0
Makakahi																	2	
Total	50	19	24	33	23	13	31	45	20	24	24	36	45	43	30	17	44	45

TABLE 7. Black swan trend counts in north and south Taranaki.

	TCP.	wal	IABLE /. DIACK SWAII LIFTIN COURTS III HOLUI AIN SOUUL L'ALAMAKH	<u>آ</u>		7 111	110101	I all	200	Tm	aran	Curr.									-		-					1		
POND LOCATION 199	93 19	94 19	1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004	6 199	7 199	8 1999	2000	2001	2002	2003 2		005 20	2005 2006 2007 2008 2009 2010	07 200	8 200	9 2010	3 2011	2011 2012	2013	2014 2015 2016	2015	2016	2017 2018	018 2	2019 2	2020 2021	2702 17		-	47
Lake Cowley (Waitara) 38	38 53	3 29	9 32	52	16	24	35	17	104	09	92 5	98 2	28 67	7 34	84	83	69	133	29	77	74	112	115	85	92	99 I	38 81	1 114		9
Lake Ngangana 7 (Waitara)		3 7	1 1	9	9	9	7	9	5	4	6	9	5 3	4	2	0	7	-	0	0		7	0	4	-	2	9	0 0		7
Lake Mangamahoe 2	-	16 9	11	12	14	15	24	6	5	20	12	16 1	19 32	2 48	19	17	30	27	75	31	93	44	38	52	34	44 2	28 3	37 37	-	59
Umutekai Rd	-	0	0 0	4	3	5	0	5	0	0	10	0	3 0	0 (3	1	0	5	0	0	0	2	0	0	4	1	3	7		0
Winstones Manutahi Road						m	-						0		2	7	5	50	1	I	2	5	4	0	4		4	2	0	7
tt Lagoon	0	0	4 2	7	4	С	4	3	1	7	-	7	2 3	7	∞	ĭ	2	2	10	7	0	4	7	7	0	2 2	22 2	25 1	9	31
	-	10		3 16	13	15	17	18	22	14	20	30 3	32 3	39 42	24	1 28	40	56	42	50	47	38	72	30	14	14	5	5 1	10 (0
Waipu Lagoons	7	0	5 0	B	4	0	4	0	9	0	0	0	4 3	3 4	1		3	9	3	2	,(n	7	0	4	4	9	5	5	9
xidation	11	0	0 15	15	0	10	7	0	0	Н	0	0	0 0	0 (0	0	0	0	0	0	2		0	4	0	0	1	0 1	7 01	4
Tariki Road		0	1 0	1	0	0	4	9	0	0	5	0	0	0 0	0	3	0	0	2	7	0	0	7	-	7	0	0	+	-	П
LandCorp Wiremu	4	1	1 6	5	4	0	9	3		0	0	3	5 2	5	2	9	0	0	0	1	0	0	Ţ	4	0	0	0	0	0	T
Arawhata Road		-	1 0	0	0	0	0	7	0	0	0	0	0 0	0 (0	2	0	0	0				0	0	0	0	0	+		T
Beach Road Omata	0	0	0 0	0	0	0	0	7	0	0	0	0	0 1	0 1	0	0	0	0	0	0	0	0	0	0	0	0	\dashv		+	
Richmond Rd					_				9	0	9	0	5 9	0 6	5	4	4	5	4	4	1	4	2	1	Ţ		1	3		
Perth Road				0	0	0	0	т	0	0	0	0		0 0	0	0	0	0	0	0	0	0	0	0	0					
Upland Road	H	-								7	10	0	, 7	2 0	3	0	0	0	0	2	0	0		0	0	0			+	
Komene Lagoon											11	0	0 2	27 dry	y 1	T	dry	0		15	dry	dry	3	dry	dry	dry	7	5	en ∞	33
Inglewood Oxy Ponds				-				N.				9	5	4 0	0	0	3	9	5	0	3	7	7	5	3	pood	7	10	4	0
Egmont Road		H												<u> </u>												1	∞	5	0	
Clarke Rd				_		V						ı Ig		5	0		L	0					0	7	0	1		1		
Stratford oxidation ponds											Ī		0	3 2	7	3	7	7	11	17	13	18	17	13	4	20	27 3	37 4	43	88
Opunake Lake	_	-	_		0	0	0	0				0		0				0	11	5	14	0	7	2	S	7	0	4	2	6
Punehu					24		∞	7	7	0	3	10	8	1 6	9	4	4	5	9	9	9	1	17	7	7	25	22	0	2	20
Opunake oxidation ponds										4 /				III =	∞		9	-	4	5	9	3	5	2		8	-		-	0
Hawera oxidation ponds					140	0 118	3 111	83	47	57	39	25	37 4	42 51	1 81	1 73	84	132	130	120	135	151	101	08	-		45		-	102
Nowell's Lakes (2)	- #	. 4	28		0	0		4	36	25	47	38	14 1	19 28	8 20	0 12	18	29	16	29	29	18	24	41	22	18	33 4	44	42	32
Lake Taumaha			0								-	∞	0	6 1		_	4	0	-	0	5	7	2	2	91	4	2	3	-	
Lake Kaikoura (Ball Rd)			l U					d			П	5	0	5 2	0		6		-		0	0	7	12	18	7	29	13	10	
Spence Road									Ш			7		2			4	-							1			+		Т
Patea oxidation pond				=									+	2	+						6	7	7	∞	7	3	m	_		
Ihupuku Lagoon		-				_						3	-	0	+	=	+	-	-				0	0	0	0	0 (1		0
Lake Maumahaki (2)		\dashv			_	_						0	7	5	2	0	7	0	0	3	0	7	m	0	0	_	m	5	_	

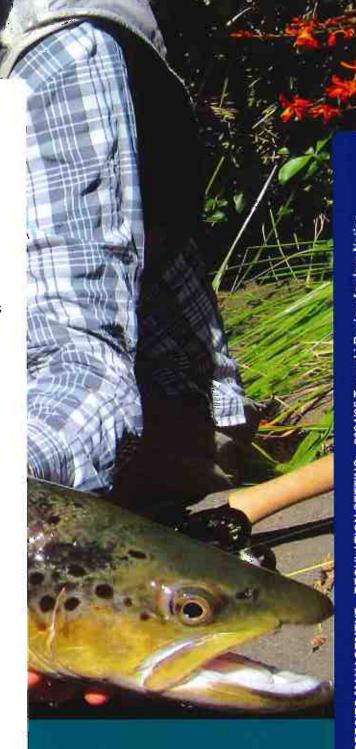
Manaia oxidation pond				_														****	Į				1		, ,	3	12	7	13	0
Tokaora quarry pond						\vdash					7			-		Ö							_		- 1	2	0	2	1	0
1					-			-	\vdash				H	-					\vdash						_				11	9
100 Wills Road																							_		H				∞	18
Eltham oxidation pond		1	-		+		M	+	-				-														5	0	2	2
TOTAL 66 83 69 85 121 222 125 225 168 240 195 265 262	83	69	85	121	122	125 2	25 1	68 2	40 1	95 2	65 2	-	178 2	280	240 2	280 2	246 2	292 4	420 389	189 3	394 4	441 4	435 4	436 3(366 33	331 374	4 531	388	424	490

This report reviews current angling regulations within the Taranaki Region.

It provides a review of regulations set in the 2022/23 anglers notice, and highlights waterways in the region that have had recent regulation amendments.

This report concludes with a recommendation to the Taranaki Fish and Game Council for angling regulations for the 2024/2025 sports fish season.

Allen Stancliff
Senior Fish and Game Officer
Taranaki Fish and Game Council
May 2024





TARANAKI FISH AND GAME COUNCIL

The Chairman

Taranaki Fish and Game Council

2024/25 DRAFT TARANAKI ANGLERS' NOTICE

Waiaua and Hangatahua (Stony) Rivers

In response to headwater erosion events in the Waiaua and Hangatahua (Stony) rivers, the Council amended the 2022/23 Anglers' Notice to set a zero-bag limit for brown trout in the Waiaua River and Lake Opunake with a 1-fish limit for rainbow trout and methods restricted to fly and spin fishing only; and a zero bag limit for brown trout in the Hangatahua (Stony) River. These regulations were retained for the 2023/24 season.

Brown trout populations in these rivers are still very much in recovery mode. While habitat in the Waiaua River has recovered well, the Hangatahua River had a minor headwater erosion event in early March 2024 with the river suffering from sand inundation and running grey with ash for several weeks. At the time of writing Opunake Lake and the Opunake power scheme is still shut down, meaning Opunake Lake has ongoing poor water quality. Two releases of hatchery rainbow trout yearlings (total 403 fish), plus a release of rainbow fry were made into the upper Waiaua River in 2022 and 2023, but so far there has been little return to anglers. It is therefore recommended that the current provisions remain in the 2024/25 Anglers' Notice.

Lake Mangamahoe - Review of Fly-fishing only regulation

An item included in this agenda discusses the issues and recommends that the current fly fishing only restriction remain at Lake Mangamahoe. Owing to the lake being a Wildlife Refuge, a water supply reservoir for New Plymouth and a reservoir for the Mangorei HEPS, there is a risk that relaxing the regulations and holding kids' trout fishing promotions there could result in loss of access to the fishery if there is too much disturbance of wildlife or a health and safety incident, such as someone drowning.

RECOMMENDATIONS

That Taranaki Fish & Game Council retain the same Taranaki Anglers' Notice conditions for the 2024/25 season as 2023/24.

Allen Stancliff Senior Field Officer 10 May 2024

Taranaki Fish and Game Region

The Taranaki region is defined here: New Zealand Gazette, 24 May 1990, No. 83, at page 1861

1. Definitions

For interpretation of terms, refer to the First Schedule of this Notice or the Freshwater Fisheries Regulations 1983.

2. Additional Requirements

First Schedule conditions apply 1.1 Note 1 There are no restrictions on the hours of fishing

There is no minimum length for trout

There are no defined coarse fishing waters in the Taranaki Fish and Game Region

No licence holder shall fish for sports fish from a boat in Lake Mangamahoe, including the Waiwhakaiho Inlet.

In the Hangatahua (Stony) River, Waiaua River and Lake Opunake no brown trout may be taken.

season Dermitted Methods Daily Rag Limits - Region Defaults 2 1 Onen

Note 3

Note 2

Water	Water Multiple sections Open seaso	Open season	Authorised	53	Daily bag limit by	nit by	Refer Clause 2 Additional
			fishing	species	Ş		Requirements
			methods	n Ji u	nil unless number shown	er shown	
				Trout	Salmon	Perch	
All lakes, rivers and		1 Oct - 30 Apr	FSB	2	← 1	No limit	Note 1
streams not mentioned							
in clause 3.2 for this							
region							

3.2 Open Season. Permitted Methods, Daily Bag Limits

Water	Multiple sections	Open season	Authorised	Da	Daily bag limit by		Refer Clause 2 Additional
			fishing	species		nil unless	Requirements
			methods		number shown		
				Trout	Salmon	Perch	
Taranaki/ Whanganui							
Huatoki Stream	downstream of Brois Street	1 Oct - 30 Sep	FSB	2	T		Note 1
	Bridge		Ĺ	(7		
Kai Auahi (Kaiauai) Stream	1000	1 Oct - 30 Apr	S	7	-1		Note 1
Kapuni Stream	upstream of State Highway 45	1 Oct - 30 Apr	S	2	\leftarrow		Note 1
	Bridge					h	
	downstream of State Highway 45	1 Oct - 30 Sep	FS	2	Н		Note 1
	Bridge					1)	
Kaupokonui Stream	downstream of State Highway 45 Bridge	1 Oct - 30 Sep	FSB	2	Н		Note 1
Lake Kohata		1 Oct - 30 Sep	FSB		N	No limit	Note 1
	excluding the Waiwhakaiho Inlet	1 Oct - 30 Sep	u.	2			Note 1, 3
Lake Mangamahoe	and Mangamahoe Stream						
	Waiwhakaiho Inlet upstream of	1 Oct - 30 Apr	ч	2			Note 1, 3
	the normal site of a landmark						
	located just upstream of the						
	confluence with						
	Lake Mangamahoe						
	Mangamahoe Stream upstream of	1 Oct - 30 Apr	Œ.	2			Note 1, 3
	the walkway swing-bridge at the			www.worden-Bark			
	head of Lake Mangamahoe						

													7 1				
Note 1, 3	Note 1	Note 1	Note 1, 2	Note 1		Note 1	Note 1	Note 1	Note 1	Note 1	Note 1	Note 1	Note 1, 2	Note 1, 2	Note 1, 2	Note 1	Note 1
		No limit		No limit		No limit	No limit	No limit	No limit			No limit					
										tH	↤	Н	Т	1	1	Н	H
7	2	2	П	2			2	2		2	2	2	2	Н	1	2	2
щ	FSB	FSB	FS	FSB		FSB	FSB	FSB	FSB	FSB	FSB	FSB	FS	FS	FS	FSB	FSB
1 Oct - 30 Sep	1 Oct - 30 Sep	1 Oct - 30 Sep	1 Oct - 30 Sep	1 Oct - 30 Apr	and 1 June - 30 Sep	1 Oct - 30 Sep	1 Oct - 30 Sep	1 Oct - 30 Sep	1 Oct - 30 Sep	1 Oct - 30 Sep	1 Oct - 30 Sep	1 Oct - 30 Sep	1 Oct - 30 Sep	1 Oct – 30 Apr	1 Oct - 30 Sep	1 Oct - 30 Sep	1 Oct - 30 Sep
Any tributary other than Waiwhakaiho Inlet and Mangamahoe Stream					10			downstream of Mangamingi Bridge		downstream of Bristol Road Bridge	ream of State Highway 3 Road Bridge	downstream of Patea Dam		upstream of State Highway 45 Bridge	downstream of State Highway 45 Bridge	downstream of State Highway 45 Bridge	downstream of State Highway 3 Devon Road Bridge
	Lake Namunamu	Lake Ngangana	Lake Opunake	Lake Ratapiko		Lake Rotokare	Lake Rotomanu	Lake Rotorangi	Lake Wiritoa	Manganui River	Mangaoraka Stream	Patea River	Hangatahua (Stony) River	Waiaua River	Waiaua River	Waingongoro River	Waiongana Stream

Waitara River	downstream of Manganui River confluence	1 Oct - 30 Sep	FSB	2	Н	No limit Note 1
Waiwhakaiho River	downstream of the normal site of a landmark that is at the end of Rimu Street extension walking track	1 Oct - 30 Sep	FSB	2	Н	Note 1
Te Ikapārua (Warea) River	downstream of State Highway 45 Bridge	1 Oct - 30 Sep	FSB	2	ᆏ	Note 1
Whanganui River	downstream of Ohura River confluence excluding tributaries	1 Oct - 30 Sep	FSB	2	П	No limit Note 1
Virginia Lake		Closed to fishing				
Waimarino					i	
Manganuioteao River	downstream of Ruatiti Road Bridge	1 Oct - 30 Sep	FSB	2	₽	Note 1
	mainstem from Ruatiti Road Bridge upstream to confluence with Makatote River	1 Oct - 30 Jun	FSB	2	\leftarrow	Note 1
Mangawhero River	downstream of Raetihi - Ohakune Road Bridge	1 Oct - 30 Sep	FSB	2		Note 1
Retaruke River	downstream of Oio Road Bridge	1 Oct - 30 Sep	FSB	2	1	Note 1
Sattlers Dam		1 Oct - 30 Sep	FSB	2		Note 1
Tokiahuru Stream	downstream of State Highway 49 Bridge	1 Oct - 30 Sep	FSB	2		Note 1
Waitaiki Stream	downstream of State Highway 49 Bridge	1 Oct - 30 Sep	FSB	2		Note 1

Review of Fishing Regulations at Lake Mangamahoe (2024)

In October 2023, the Council received a request from the Inglewood Rod, Gun & Recreation Club (IRG&RC) seeking changes to the fishing regulations at Lake Mangamahoe.

This report provides a review of the current fishing regulations at Lake Mangamahoe, including a review of the fishery, its amenity value, sustainability, and its classification as a Wildlife Refuge.

The report concludes with a suggestion to Council in response to the IRG&RC's proposal for regulation change.

Allen Stancliff
Senior Fish and Game Officer
Taranaki Fish and Game Council
May 2024



TARANAKI FISH AND GAME COUNCIL

The Chairman Taranaki Fish and Game Council

Review of Fishing Regulations at Lake Mangamahoe

In October 2023, the Council received a letter (attached) from the Inglewood Rod, Gun & Recreation Club (IRG&RC) requesting that the current fly fishing only restriction at Lake Mangamahoe be relaxed to allow lure/spin fishing with a spinning rod to encourage use by junior and less experienced anglers and to hold kids' trout fishing promotions there. The letter states that the lake is "currently underutilized" and allowing additional fishing options will encourage families to fish the lake.

Background

Lake Mangamahoe is a 24-hectare hydro reservoir for the Mangorei HEPS owned by Manawa Energy (formerly Trustpower Ltd.) which also serves as a water supply reservoir for New Plymouth City, Bell Block, Waitara and surrounds and is gazetted as a Wildlife Refuge pursuant to Section 14 of the Wildlife Act 1953. The lake was created in the early 1930's by the damming of Mangamahoe Stream. Up to 10,000 l/s of water is diverted from the Waiwhakaiho River into Lake Mangamahoe for water supply and hydro generation purposes via a river diversion weir and a 500m long concrete-lined tunnel.

The former Taranaki Acclimatisation Society saw the potential of Lake Mangamahoe as a trout fishery and obtained permission to stock the lake and opened it for fishing on 1st October 1932, on the basis that only flyfishing would be permitted and there would be no wading. This was because Lake Mangamahoe was one of the first water supply reservoirs in NZ to be opened to trout fishing and apparently there were concerns about what would happen (in terms of tapu etc.) if someone fell in while fishing and drowned.

The lake fishery and the inlet from the Waiwhakaiho River have remained restricted to flyfishing only (with fly rod, fly reel, fly line and artificial fly) throughout the fishery's 92-year history. No fishing from a boat is permitted, owing to its use as a water supply reservoir and a Wildlife Refuge. A two trout daily bag limit currently applies, and the lake is open to all year angling, with the Waiwhakaiho inlet downstream of the diversion tunnel and the Mangamahoe Stream tributary open from 1st October - 30th April.

Lake Mangamahoe supports a small, self-sustaining population of wild brown trout and a rainbow trout population maintained by annual releases of around 300 Lake Tarawera-strain hatchery yearlings raised at Fish & Game's Hawera trout hatchery. Trout spawning occurs in Mangamahoe Stream and in the lake inlet, but the spawning success of rainbow trout appears low, as few wild rainbows are caught in the lake. Brown trout recruitment likely stems from Mangamahoe Stream, and from juveniles entrained in water diverted from the Waiwhakaiho River via the inlet tunnel (there are 100mm spacings between trash bars at the tunnel's river entrance).

Owing to high water velocities, trout are unable to leave the lake by swimming upstream through the Waiwhakaiho diversion tunnel. Trash bars of 30-35mm spacing on the lake outlet confine most fish to the lake, although some may be lost over the spillway to the lower Mangamahoe Stream which operates occasionally during flood events. Trout grow to a good average size of about 1.7kg in Lake Mangamahoe, with the largest trout on record weighing in at 3.4kg. Most trout are in good condition, although some older fish fail to recover condition after spawning.

Two wooden casting platforms have been built at Lake Mangamahoe to improve angler access, the first in 1994 and the second in 2020. Taranaki Fish & Game has obtained permission from Manawa Energy and the

New Plymouth District Council (NPDC) to construct a third casting platform, although not in the preferred location near the "roundabout".

Over the years there have been several informal requests to liberalise the regulations to allow spin fishing and bait fishing at Lake Mangamahoe, to allow the use of float tubes, and to release more trout and hold kids fishing promotions there. The last review of the Mangamahoe regulations occurred in 2007 and so it is timely to reconsider such requests in the light of the IRG&RC's letter and Fish & Game's R3 objectives.

Angling Use

Despite the current fishing method restrictions, results from Fish & Game's National Angler Survey (Table 1) indicate that Lake Mangamahoe is one of the most popular Taranaki region fisheries. In the 2014-15 season it was estimated to receive 1,210 angler visits, which represented 13.7% of the region's total angling effort. In 2021-22 the estimate was 594 angler visits and 7.2% of the region's total effort, making it the region's 4th most popular fishery.

TABLE 1: Estimated angling use of the more popular Taranaki Region trout fisheries (F&G NAS).

	Estin	nated Angler Visi	ts Per Season		
Angling Water	1994-1995	2001-2002	2007-2008	2014-2015	2021-2022
Manganuioteao River	1,970	760	2,220	1,150	909
Waingongoro River	1,550	1,010	1,210	560	110
Lake Mangamahoe	1,380	830	1,920	1,210	594
Waiwhakaiho River	540	340	1,240	1,210	538
Patea River	280	880	1,450	540	685
Mangawhero River	620	430	420	250	393
Manganui River	160	160	600	310	123
Kaupokonui Stream	160	230	290	200	157
Stony River	150	410	230	290	508
Kapuni Stream	50	110	50	30	34
Lake Rotomanu	720	630	300	730	658
Lake Ratapiko	-	340	650	80	164
Lake Rotorangi	230	150	130	40	103
Lake Namunamu	300	30	30	120	22
Opunake Lake	30	10	200	190	
Lake Ngangana		200	100	10	6
Lake Wiritoa	1.0	50	100	80	67
Virginia Lake	320	100			
Total for Taranaki Region	13,150	8,230	16,380	8,850	8,240

^{-- =} not fished by survey respondents

Fishery Sustainability

Lake Mangamahoe is relatively small at 24ha and with up to a 1m fluctuation in water level due to power generation requirements, extensive silting at the lake-head and cool winter water temperatures, the habitat is only moderately productive.

Peak winter spawning counts in all tributaries combined have seldom exceeded 40 trout (Figure 1). While not every adult fish will spawn every year, and the count may not coincide with the actual peak in numbers every year, the counts indicate that the Lake Mangamahoe fishery is based on relatively low numbers of trout, particularly brown trout. It should therefore be considered vulnerable to over-harvest.

While the fishery is popular, flyfishers tend to be experienced anglers who are sensitive to the needs of the fishery. A high proportion practice voluntary catch and release or take only the occasional fish (mainly hatchery rainbows) for the table.

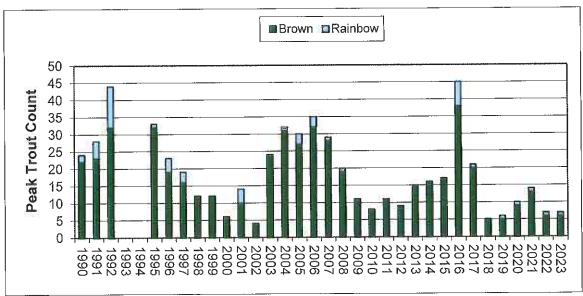


FIGURE 1. Peak counts of brown and rainbow trout in Mangamahoe Stream, 1990-2023.

Wildlife Refuge

The NPDC Lake Mangamahoe Management Plan (2011) states that "part of Lake Mangamahoe was declared a sanctuary in 1935 under the then Animals Protection and Game Act 1921-22 and is now constituted as a wildlife refuge under Section 14 of the Wildlife Act 1953. Care must be taken to ensure waterfowl are not disturbed or interfered with".

Lake Mangamahoe is home to significant numbers of mallard/grey duck, scaup, Australasian coot, Canada goose, black swan and paradise shelduck, as well as the occasional dabchick and shoveler duck.

With increased public use of the "round the lake" walking track and the popularity of Lake Mangamahoe for picnics, a proportion of the mallards, swan and geese see people as sources of food and have become quite tame. Despite the abundance of waterfowl, there has been a very low incidence of waterfowl becoming entangled or hooked up in gear used by flyfishers.

Illegal release of perch and rudd

While perch have been present in many Taranaki lakes and ponds for decades, perch were illegally released into New Plymouth's Lake Rotomanu in the mid-1990's and also into Lake Ngangana at Waitara soon after a rainbow trout fishery was established there in 2001. Recently it was found that rudd have become established in Lake Ngangana, probably in the last 3-4 years as a result of an illegal release.

Both these lakes are open to all legal methods, including spin and bait fishing. This has led to a view that the reason perch have not been illegally released into Lake Mangamahoe is because of the flyfishing only restriction (spin and bait fishing being the two methods commonly used to catch perch). This may or may not be true, as Opunake Lake is open to all methods, but does not (yet) contain perch.

There is little doubt that the introduction of perch to Lake Mangamahoe would reduce the productivity of the trout fishery and would be irreversible. Under the Council's Policy for Authority to Transfer and Release Fish (adopted 26th January 2002), anglers will not be allowed to utilise sports fisheries that have not been established lawfully.

Discussion

Sustainability

Apart from 90+ years of tradition, a major justification for the flyfishing only regulation at Lake Mangamahoe has been one of sustainability. Relaxing the regulations to allow spin fishing, or spin and bait fishing would almost certainly increase the harvest and adversely affect the sustainability of the brown trout fishery. A reduced 1-fish daily bag limit and/or a maximum size limit restriction might help but may not be effective. A more restrictive bag limit may also reduce the current angling opportunity. For example, under the present 2-fish limit, a flyfisher at Lake Mangamahoe can kill a trout and carry on fishing, whereas with a 1-fish limit they would have to stop fishing on killing a fish. Increasing the stocking rate of rainbow trout may increase the numbers of fish available, but the fish would likely be of smaller size and potentially poorer condition as a result of habitat limitations.

The needs of other users of habitats and natural resources

Lake Mangamahoe is a Wildlife Refuge and as such, is home to significant numbers of waterfowl. Despite this, there has been a very low incidence of wildlife becoming entangled or hooked up in fishing gear. This is in stark contrast to the situation experienced at Whanganui's Virginia Lake, where problems with waterfowl being deliberately hooked or becoming entangled in nylon etc. led to bad press and eventually to Virginia Lake being permanently closed to fishing. Liberalisation of the angling methods at Lake Mangamahoe could potentially result in a similar situation occurring here. Opening up the lake to spin fishing would undoubtedly increase the disturbance of waterfowl in the Refuge, particularly during kids' fishing events, when up to 100 or more anglers could be expected.

Lake Mangamahoe is also an important water supply reservoir. While the lake itself is no longer owned by NPDC (it has a management agreement with Manawa Energy), increasing the angling use of the lake by liberalising the allowable methods, followed by an incident (say) where someone drowns, could result in permanent closure of the fishery. At present, anglers at Lake Mangamahoe are in a privileged position, as other recreational activities are prohibited. A NPDC sign inside the road entrance states, "No recreational activities are permitted on or in the lake". Other NPDC signs state "Lake Mangamahoe provides water for the city of New Plymouth. In the interest of public safety and health the following activities are prohibited in the immediate area of the lake - Boating, Swimming, Camping, Horse riding". Liberalising angling methods at Lake Mangamahoe to allow increased use by a greater range of anglers could potentially compromise access to the fishery if there are any incidents.

Dissuading the illegal release of perch and rudd

The reason perch and rudd have not been illegally released into Lake Mangamahoe may be because of the flyfishing only restriction. A change in the status of the fishery may encourage the release of these species.

Maximisation of recreational opportunity

Despite the restriction on methods, Lake Mangamahoe remains one of the most popular fisheries in the region. The type of recreational opportunity provided by the fishery is obviously appreciated and soughtafter. Allowing spin or spin and bait fishing could conceivably change the very features of the fishery that attract flyfishers, leading to a decline in use by this group. The flyfishing only regulation does not deny the use of the lake to junior licence holders and there are anglers as young as 12 who have used the fishery over the years (many have gone on to become experts). The regulation encourages anglers to take up flyfishing and the region's anglers should be consulted before any regulatory changes are made.

It has been stated that flyfishing only waters are elitist and should be dispensed with in order to maximise recreational opportunity by allowing all fish licence holders the same rights of access to the fishery. However, the restriction on methods at Lake Mangamahoe can be justified as a compromise between the three competing requirements: of sustainability, the needs of other users of habitats and natural resources and the maximisation of recreational opportunity. Recreational opportunities have been maximised at Lake Mangamahoe in terms of season length (open all year) and the two fish limit is the same as that applying to most other ringplain waters. It remains the region's only fly fishing only water.

In terms of regional angling method restrictions, Taranaki has the second most liberal set of regulations in the country, after West Coast and can be said to have "maximised angling opportunity" to a far greater extent than most other regions. The Council could allow artificial fly to be used at Lake Mangamahoe, which would allow the use of a spinning rod, with bubble float and fly. But once spinning rods are allowed, anglers will inevitably want to use spinners, making it more of a compliance issue than it is currently.

Feasibility of holding Kids' Fishing Promotions at Lake Mangamahoe

It has been asked why the Council doesn't hold kids' trout fishing promotions at Lake Mangamahoe, as it does at Lake Rotomanu and in the Patea River at Stratford.

The kids' fishing promotions currently all involve children fishing for 2-year-old rainbow trout with bait (e.g. worms, creeper, bread dough) as well as spinners. The use of bait at these promotions develops an expectation that people will be able to return to fish for the remaining trout with bait. All waters used in these promotions are therefore open to all legal methods. Use of bait at Lake Mangamahoe could well create issues with hooking waterfowl as occurred at Virginia Lake. Restricting anglers to spin gear with spinners and bubble floats with artificial fly could be an option, but there is still the issue of disturbance to waterfowl in a Wildlife Refuge both during and following kids fishing events.

H&S issues include the potential for children to fall into deep water, including off the newer F&G casting platform and the outlet channel, where there can be a strong flow of water during power generation. Also, vehicle traffic on parts of the access road that are narrow and graveled could be problematic. There is also a significant amount of vegetation around the lake margin bordering the road which can impede access for events with lots of anglers.

The impacts of stocking up to 500 2-year-old rainbow trout into the lake each year also needs to be considered, as the current size and condition of fish could well deteriorate.

Given the finite supply of fish, staff and volunteer resources, if the kids' fishing promotion was shifted to Lake Mangamahoe, it's likely the Lake Rotomanu event would cease. Currently, children can use a push-bike to get to Lake Rotomanu under their own steam and the lake is very close to town and accessible via the coastal walkway or Clemow Road. In contrast, Lake Mangamahoe is located some 6km from the edge of the city via a busy motorway and junior anglers would need to be taken there by car. This would effectively result in a reduction in angling opportunity for junior licence holders from that which currently exists. This was a downside of moving the Whanganui kids fishing event from Virginia Lake out to Lake Wiritoa.

Any changes to the management of the fishery at Lake Mangamahoe to hold kids' trout fishing promotions, will need to be approved by the Department of Conservation as the authority administering the Wildlife Refuge, Manawa Energy as owner of the lake and New Plymouth District Council as manager of the lake margin and the lake as a water supply reservoir.

Given all of the above, it is the staff view that retaining Lake Rotomanu as the venue for kids' trout fishing event and focusing on advocacy to improve Rotomanu's water quality is the preferred option and that Lake Mangamahoe should remain restricted to flyfishing only, with fly rod, fly reel, fly line and artificial fly.

Allen Stancliff Senior Field Officer Taranaki Fish & Game 8th May 2024

5.1 Recreation and Use

Goal

To encourage recreation and leisure activities within the park in a way that compliments the needs and values of all users, and protects and preserves the park's environment and the value of Lake Mangamahoe as a Wildlife Refuge without compromising the primary purpose of the park of water catchment.

- 5.1.3 Lake Mangamahoe is considered to be suitable for the following recreation and leisure activities:
 - Mountain Bike Riding
 - Horse Riding
 - Walking and Running
 - Rogaining
 - Orienteering
 - Fly fishing
 - Emergency Training
 - Wildlife viewing
 - Picnicking
 - Dog walking except within the Wildlife Refuge and within 200m from the lake edge.
 - Other informal active and passive recreation.
- 5.1.4 Water sports other than fly fishing are not permitted unless approved through a permit from the Department of Conservation.
- 5.1.5 Hunting is not anticipated as an activity in this park and not permitted in the Wildlife Refuge without a permit from the Department of Conservation.
 - O Lake Use Objectives
 - To continue to avoid, remedy or mitigate any potential contamination of the water supply.
- b) To manage the lake as a restricted catchment and a wildlife refuge area under the Wildlife Act 1953.
- (a) Trout Fishery Objectives
- a) Lake Mangamahoe provides sport fish license holders with a high quality fishery for brown and rainbow trout in a scenic and un-crowded environment.

Policies

- 5.1.47 The trout fishery in Lake Mangamahoe will be maintained by Fish & Game NZ through releases of hatchery reared trout, as necessary.
- 5.1.48 Appropriate signage will be used to inform anglers and the general public of regulations governing the Lake Mangamahoe trout fishery.
- 5.1.49 Angler access to the margin of Lake Mangamahoe will be maintained and enhanced, where practicable and appropriate, including through the construction of casting platforms on the lake margin. Fish and Game NZ will be responsible for the provision of such structures.

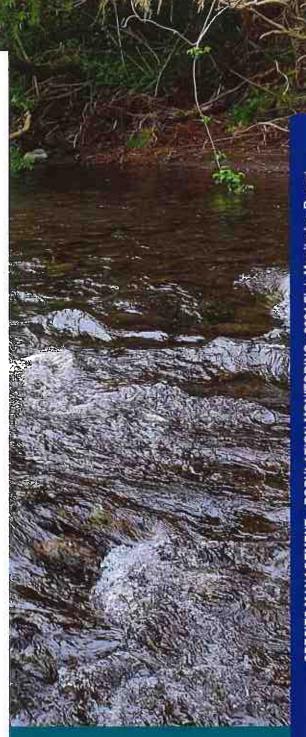
2024 Fish Monitoring Report

This report has been prepared to provide insight into the status of the Taranaki Region's Trout Fishery for the 2023-2024 season.

The primary objective of this report is to provide data that will enable informed decision making for future management.

The report summarises data received from local angler and national survey results, alongside species and habitat data gathered from various environmental monitoring efforts undertaken throughout the region.

> **Allen Stancliff** Senior Fish and Game Officer Taranaki Fish and Game Council October 2024





TARANAKI FISH AND GAME COUNCIL

The Chairman
Taranaki Fish and Game Council

2023/24 Fishery Monitoring Report

Angler diary scheme

The Species Management section of the Council's 2023/24 Annual Plan has a planned result to "Monitor and report information on the status of the region's trout fisheries sufficient to measure overall angler success (through a diary scheme), set effective regulations and inform management directions".

This 2023/24 season was the seventh season since 2017/18 that a voluntary angler diary scheme has been used across the Taranaki Fish and Game region.

Unfortunately, this year only 9 anglers returned season data, compared with 19 anglers in 2022/23, 21 anglers in 2021/22 and 2020/2021, 22 in 2019/2020, 16 in 2018/2019 and 23 in 2017/18. The data provided a record of 115 angling trips greater than 15 minutes duration, compared to 139, 227, 207, 249 and 188 angling trips in the preceding 5 years.

In the following analysis the average catch rate was calculated by first determining the catch rate for each individual angler trip (number of fish caught / divided by how long the angler spent fishing) then averaging all these catch rates for the particular river or lake. This ensures each trip received equal weighting and therefore the average catch rate is a more appropriate measure of what an angler experienced on average. In this way the catch rate can also be used as one measure of angler satisfaction.

However, with this approach it is necessary to limit the analysis to trips longer than 15 minutes, otherwise unrealistic individual catch rates may be obtained which in turn skew the overall average calculated. The catch rates (cpue) listed in Tables 1 & 2 below represent the catch of trout larger than 30cm in length per hour of fishing effort. For example, a cpue of 0.5 equals half a trout per hour or one trout for every two hours fishing.

Table 1 highlights that, like previous seasons, most effort (89% of the total) was recorded on rivers in the region. While the average catch rate for rivers (0.43 fish/hr) was the lowest recorded over the seven seasons, it is still respectable when compared to the combined average catch rates of 0.44 for the Tongariro (0.33), Tauranga Taupo (0.41) and Hinemaiaia (0.56) rivers within the Taupo Fishery (DOC Liaison 2022).

The average catch rate for lakes (0.46 fish/hr, Table 1) was lower than in the 2022 season, but as only 17 trips to lakes were recorded by diarists, the data is not definitive. All the seven rainbow trout (2 large & 5 small) caught at Lake Mangamahoe by diarists were identified as hatchery fish, indicating that the annual release of around 300 rainbows is still providing a good fishing opportunity.

Catch rate data for some of the larger, more popular river fisheries is presented in Table 2. Data has not been presented for some of the smaller streams in accordance with an undertaking not to identify diarist's favourite small stream fisheries.

With small sample sizes, the average catch rate can be strongly influenced by the results of one or two trips and this can be misleading. For example, no large brown trout were landed by diarists in the Manganui River, but then only four trips were recorded. Diarists didn't report catching any rainbow trout in the Waingongoro River in six trips, but a number of these trips were to the upper river upstream of the Eltham weir where brown trout predominate.

Catch rates look to have rebounded in the **Manganui o Te Ao River**, (0.97 fish/hr cf. 0.45 fish/hr in 2022) but this result is based on only three trips and 15 hours of fishing effort.

Little data is available for the **Waiaua River** at Opunake, which is recovering from the July 2021 flood that caused headwater erosion and decimated the habitat and the fishery. Since this event, 1,000 rainbow trout fry have been released into a stable tributary, along with 803 rainbow yearlings released into the mainstem. However, it is still not known if these releases have been successful, and anglers will be encouraged to fish the Waiaua in the 2024/25 season. With little water inflow from the Waiaua River, **Opunake Lake** remains in a poor state with frequent algal blooms and until the hydro scheme is back up and running it will not be worthwhile releasing trout there.

The Hangatahua/Stony River ran grey with ash for several weeks following a flood on 13th April 2024, but anglers reported seeing fish once the river settled down again. In six trips, diarists reported catching four small and five large hatchery rainbow trout in 10 hours of fishing effort. No brown trout were caught by diarists. While the river continues to experience periodic erosion events, in between times it receives a significant amount of angling use, with the National Angler survey estimating around 500 angler visits during the 2021/22 season. Given the 'here today - gone tomorrow' nature of the fishery, it is still appropriate to have the river open to angling all year and to continue with annual releases of 200 17-month brown and rainbow trout to bolster the fishery when conditions are suitable.

The number of recorded trips to the **upper Patea River** remained low and little can be said about the results. It's a similar situation for the lower Patea River, with only one trip recorded by diarists (Table 2). Likewise, use of the **Waingongoro River** by diarists remains low, with only 6 trips recorded. Encouraging diarists to fish the Waingongoro and recruiting new diarists in the coming season may help to provide more information, as indications are that there is good fishing to be had.

The **Waiwhakaiho River** has also seen a drop in use by diarists in the last two seasons. Diarists landed five large brown trout in 13.5 hours of fishing, to give an average catch rate of 0.4 fish per hour. **Kaupokonui Stream** fished fairly consistently for both rainbow and brown trout.

The small number of diary returns this season has had an impact on the accuracy of the information and how it can be interpreted. It is common for diary schemes to start off with high returns and then decline over time as anglers get tired of recording their effort or reduce their fishing activity and it becomes hard to find new anglers to take their place. However, diaries have so far been sent out to 22 anglers for the start of the 2024/25 season and staff will look to recruit more willing participants.

Table 1: Hours of angling effort and average catch rate (trout > 30cm/hr) by water type for Taranaki F&G Region as recorded by diarists during the 2019 – 2023 seasons.

	Trips n	Trips recorded				Total hours	ours				% of total angling effort	tal angl	ing effo	ť		-	(verage	trip len	Average trip length (hrs)			Avera	Average catch rate	rate	
Season	2023	2022	2021	2020	2019	2023	23 2022 2	2021 2020	2020	2019 2	2023	2022	2021	2020	2019	2023	2022	2021	2020	2019	2023	2022	2021	2020	2019
Lakes	17	24	52	26	96	22	31	94	85	168	10.9	17.3	16.1	15.4	27.4	1.28	1.30	1.81	1.30 1.81 2.36	1.75	0.46	0.64	0.32	0.28	0.59
Rivers	86	115	175	171	155	179	239	490	468	445	89.1	82.7	83.9	84.6 72.6	72.6	1.82	2.08	2.8	2.73	2.9	0.43	0.55	0.52	09.0	0.66

Table 2: Number of trips recorded and average catch rate (trout per hour) of large (> 30cm) rainbow, brown and all trout combined by water for 2023/24 Taranaki F&G Region angler diary scheme (previous 6 seasons).

Water	Trips	Trips recorded	791					CPUE	large ra	CPUE large rainbow trout	trout			CPU	E large t	CPUE large brown trout	out			9	PUElar	CPUE large trout		
	2023	2022	2021	2020	2019	2018	2023	2022	2021	2020	2019	2018	2023	2022	2021	2020	2019	2018	2023	2022	2021	2020	2019	2018
Kaupokonui Stream	12	11	9	m	00	60	0.53	0.53	0.25	0.24	0.32	92.0	0.21	0.21	0.13	0.00	0.24	0.19	0.74	0.75	0.38	0.24	0.56	0.95
Patea River Upper	4	2	24	36	24	42	o	0.54	0.13	0.15	0.09	0.2	0.18	0,46	0.20	0.45	0.43	9.0	0.18	н	0.33	09.0	0.52	0.8
Patea River Lower	н	1	7				0	0.50	0.29				0	0	0.17				0	0.50	0.47			
Stony River	9	m	17	30	14	2	0.63	1.2	0.75	0.56	0.95	0.72	0	0	0	0	0	0	0.63	1.2	0.75	0.56	0.95	0.72
Waiaua River	2	w	0	2	17	17	0	0	0	0.04	0.13	0.31	0	0	0	0.23	0.28	0.26	0	0	0	0.27	0.41	0.56
Waingongoro River	9	7	on	0	17	28	0	0	0.70	0.31	0:30	0.57	0.35	0.33	0.15	0.05	0.15	0.32	0.35	0.33	0.85	0.36	0.45	0.89
Waiwhakaiho River	10	10	23	32	17	17	0	0	0.02	0	0	0	0.40	0.17	0.16	0.35	0.91	0.73	0.40	0.17	0.17	0.35	0.91	0.73
Manganui o Te ao River	8	6	27	14	12	7	0.87	0.45	0.58	1.49	0.59	0.82	0.10	0	0.08	0.11	0.36	0	0.97	0.45	0.67	1.60	0.95	0.82
Mangawhero River	0	0	2				0	0	0				0	0	0.50				0	0	0.50			
Manganui River	4	13	4	7	7	9	0	0	0	0	0	0	0	0.39	0.22	0.23	0.38	0.78	0	0.39	0.22	0.23	0.38	0.78
Lake Mangamahoe	Ħ	23	IJ.	32	87	11	0.15	0.51	0.30	0.15	0.47	0.53		0.17	0.04	0.07	0.1	0.31	0.37	0.68	0.34	0.22	0.57	0.85

Waiongana/Mangaoraka Stream Investigation

The Species Management section of the Council's 2023/24 Annual Plan has a planned result to "Assess juvenile trout recruitment in Waiongana/ Mangaoraka Stream to compare with baseline information from other catchment surveys".

With help from Bart Jansma (Riverwise Consulting) 11 sites in the Waiongana/Mangaoraka Stream catchment were electric fished on 11th and 12th December 2023.

A total of 10 brown trout fry were found at Site 1 in Waiongana Stream just downstream of the national park boundary (Table 3) where water quality was pristine. However, despite generally very good riparian vegetation, water quality had deteriorated significantly by the time streams reached Inglewood, with abundant streambed algal growth and a poor quality and quantity macroinvertebrate fauna present. Two further brown trout fry were found in the Manganaeia Stream tributary just upstream of the Waiongana confluence and one fry in Mangaonaia Stream in the Lepperton area. This suggests there is only limited recruitment of brown trout in parts of the catchment subject to nutrient enrichment and sediment runoff from intensive dairy farms.

The survey results support the findings of a staff report completed in 2022/23 which summarised available information on the catchment. TRC State of the Environment Monitoring information for macroinvertebrates, periphyton and physicochemical water quality indicated that the middle and lower reaches of Waiongana/Mangaoraka Stream have poor water quality, with ecosystem health adversely affected by point and diffuse source discharges of nutrients and sediment, and with several attributes at or below NPS-FM national bottom lines (D-band).

This occurs despite generally very good riparian vegetation present throughout much of the catchment and indicates that additional measures need to be undertaken to improve water quality, perhaps through the implementation of Freshwater Farm Plans.

Generally healthy populations of native fish were recorded (Table 3), particularly longfin eel and redfin bully. The presence of an abundant population of *paratya* shrimp at downstream sites will provide an additional food source for trout that will go some way to offsetting impacts on the macroinvertebrate fauna.

The total number of each species recorded at each site is presented in Table 3.

Table 3. The total number of each species found at each site during the Waiongana River catchment electric fishing survey, 11/12 December 2023.

Survey Site				Spi	ecies			
	Brown Trout	Torrent Fish	Eel	Redfin Bully	Lamprey ammocoete	Shrimp	Inanga	Koura
Site 1 – Waiongana near National Park	10		2					
Site 2 – Mangaoraka near National Park			2					1
Site 3 – Mangaoraka SH3			11					1
Site 4 – Manganaeia Stream confluence ds Inglewood	2		9	2				
Site 5 – Waiongana-iti Stream Hursthouse Rd.			12	6				1
Site 6 – Waiongana SH3A		1	8	10				
Site 7 – Awai Stream (Mangaoraka confl.)		1	11	:5		lots	1	
Site 8 – Mangaoraka ds Awai confuence		2	8	4	5	yes		
Site 9 – Mangaoraka us SH3	100		25	5		lots		
Site 10 – Mangaonaia (Waiongana confl.)	1		11	43		lots	1	
Site 11 – Waiongana (Kairau Rd. West)			23	97		lots		1

Waingongoro Catchment Fishery Review

The Species Management section of the Council's 2023/24 Annual Plan also had a planned result to "Complete resource inventory of the Waingongoro River catchment to determine current status of the trout fishery and identify threats and opportunities (yr 2 of 2)"

The Waingongoro catchment fishery review report is still in draft form (some 55 pages) and has not yet been completed. It summarises available information on the catchment and looks at options for enhancement of water quality and the trout fishery. Data from the TRC State of the Environment monitoring programmes for macroinvertebrates, periphyton and physiochemical water quality have been collated to document water quality and ecosystem health.

Riparian fencing and planting in the catchment is going well with 94.2% of the catchment fenced (69.1km left to do) and 87% planted (130km left to do; TRC April 2023). However, the significant number of treated farm dairy effluent and other discharges to land and water, as well as stormwater and groundwater runoff results in a progressive decline in water quality in the middle and lower reaches of the catchment. Recycling of farm dairy effluent to land is increasing as resource consents come up for renewal, but identifying and protecting critical source areas of stormwater and groundwater runoff is needed to improve water quality and the macroinvertebrate communities that provide food for native fish and trout.

Lake Mangamahoe Trout Spawning Survey

Lake Mangamahoe is a 24ha hydro reservoir located near New Plymouth. It supports a fishery based on wild brown trout, supplemented with the annual release of around 300 hatchery rainbows. Brown trout recruitment most likely stems from spawning in Mangamahoe Stream and from juveniles entrained in water diverted from the Waiwhakaiho River via the lake inlet tunnel. The fishery is restricted to fly fishing only and is one of the most popular in the region.

Spawning surveys of Mangamahoe Stream have been carried out since 1990 (Figure 1) in a 1.5km section between SH3 and a waterfall. The reach is mainly used by brown trout, with numbers of fish and spawning redds fluctuating over time. In 2024, an initial survey was undertaken on 21st June to enhance known and potential spawning sites. A total of three sites were enhanced, with 6 brown trout (2 pairs) and 2 rainbow trout (1 pair) observed.

A repeat survey on 10th July at the spawning peak recorded 9 redds (4 small, 2 medium, 3 large), 3 brown trout (plus 2 dead fish) and no rainbow trout in Mangamahoe Stream. The observed activity remained at a relatively low level (Figure 1). The number of spawning sites in Mangamahoe Stream has reduced over time as a result of the impact of floods, but the current level of spawning is still likely to provide a reasonable level of recruitment to the Lake Mangamahoe fishery.

A significant amount of spawning was observed in the lake inlet downstream of the Waiwhakaiho River diversion tunnel outlet, with 5 large redds, 8 brown and 4 rainbow trout seen. However, spawning and fry production in the inlet is unlikely to contribute significantly to the fishery, as the flow is swift and deep and there is little rearing habitat for fry.

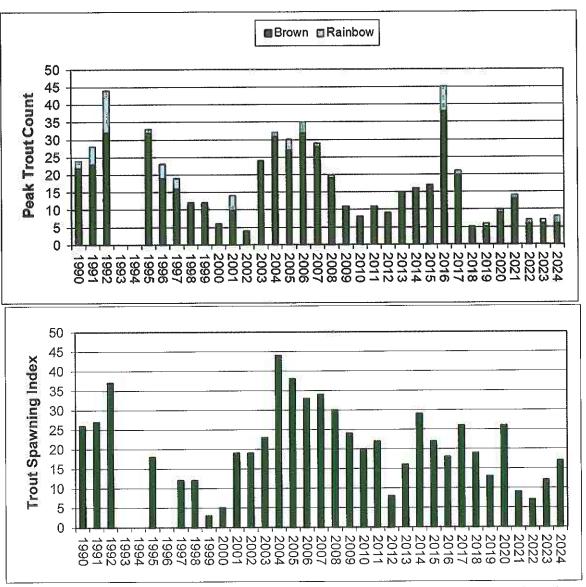
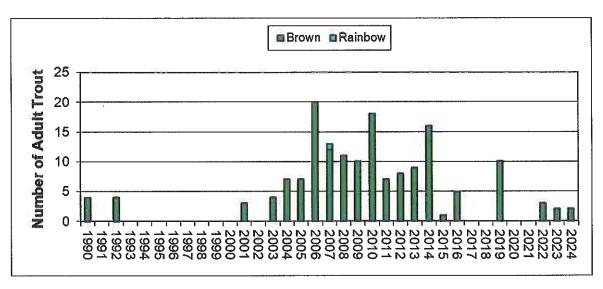


Figure 1. Peak counts of spawning trout in Mangamahoe Stream (top) and spawning indices derived from the number and size of spawning redds seen (bottom).

Mangorei Stream Trout Spawning Survey

Mangorei Stream is a major tributary of the lower Waiwhakaiho River, entering the mainstem just downstream of the outlet to Mangorei power station and the 6km residual flow reach. Its low gradient lower reaches contain significant amounts of gravel and a 1.8km section upstream of the Waiwhakaiho confluence has been monitored for trout spawning since 1990 (Figure 2), although not as often as Mangamahoe Stream.

A survey on 10th July close to the spawning peak recorded 6 redds (1 small, 2 medium, 3 large) and 2 jack brown trout and one juvenile brown. Spawning activity remained at a low ebb compared with historical counts (Figure 2) and appeared consistent with anglers reports of hard fishing in the lower Waiwhakaiho River over the last couple of seasons.



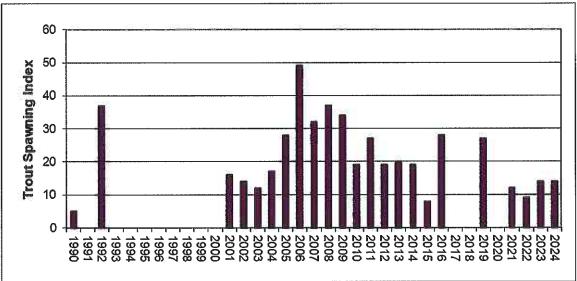


Figure 2. Counts of spawning trout in Mangorei Stream (top) and spawning indices derived from the number and size of spawning redds seen (bottom).

National Angler Survey - Taranaki Results

After much delay, results of the 2021/22 National Angler Survey, prepared by NIWA for Fish & Game NZ, became available in July 2023. However, a summary of the Taranaki results has not yet been presented to Council.

Table 4 below summarises results from Taranaki waters from the five national surveys completed to date. It's not an exhaustive list but includes most of the waters in the region.

Table 4. National Angler Survey – Taranaki Results

Lake or river	1994/95	2001/02	2007/08	2014/15	2021/22
Lake Ratapiko		340	650	80	164
Lake Namunamu	300	30	30	130	22
Sattlers Dam					9
Lake Wiritoa	10	50	100	80	67
Lake Kohata		110			
Lake Rotomanu	720	620	300	730	658
Lake Ngangana		200	100	10	6
Lake Mangamahoe	1 380	830	1 910	1 210	594
Lake Rotokare					202
Lake Rotorangi	230	150	130	40	103
Lake Opunake	30	4	200	190	
Mangawhero River	620	430	420	250	393
Taonui Stream	400	70	50	100	71
Tokiahuru Stream	80	30			29
Waitaiki Stream	30	40	40	10	67
Whanganui River		189	371	674	1 005
Manganui-o-te-ao River	1 970	760	2 381	1 230	909
Ruatiti Stream	30		140	20	192
Orautoha Stream		30	80		
Waimarino Stream	20	40	50		13
Makatote River	120		5	13	4
Retaruke River	80	80	100	190	202
Patea River	280	880	1 450	545	685*
Waingongoro River	1 550	1 010	1 210	560	110
Mangatoki Stream	200	30	10	20	14
Kapuni Stream	50	110	50	30	34
Kaupokonui Stream	160	230	290	200	157
Mangawhero Stream		30	20	10	23
Otakeho Stream		10	40		29
Taungatara Stream	10		230	10	
Waiaua River	100	10	50	50	114
Okahu Stream	80	10	40	10	8
Warea River	30	30	130	50	54
Stony River	150	410	267	285	508
Timaru Stream	30	10	130	120	
Oakura River	30	40	80	30	11
Te Henui Stream	290	20	60		
Waiwhakaiho River	530	340	1 240	1 214	538
Mangorei Stream	110		20	10	32
Kai Auahi Stream	100		70	108	12
Waiongana Stream	100	20	80	180	44
Mangaoraka Stream	190	90	60		
Waitara River	20	10	120	30	106

	13 150	8 230	16 380	8 850	8,240
Maketawa Stream	100	40	60	10	26
Ngatoro Stream	40		140	60	
Manganui River	160	150	600	310	123

^{*}lower Patea River = 276; upper Patea River = 409

RECOMMENDATION:

• THAT THE 2023/24 FISHERY MONITORING REPORT BE RECEIVED.

Allen Stancliff

3 October 2024

This report provides data on Fish and Games Hawera Hatchery operations.

It includes data on the release of Fry, Fingerling, Yearling, and Two-Year-old Rainbow trout into various waterways throughout the region.

The report also presents an analysis of the operating costs involved, and an exploration of cost-per-fish-reared.

Allen Stancliff
Senior Fish and Game Officer
Taranaki Fish and Game Council
September 2024





TARANAKI FISH AND GAME COUNCIL

The Chairman

Taranaki Fish and Game Council

2023/24 HATCHERY AND TROUT LIBERATIONS REPORT

1. INTRODUCTION

The Council's 2023/24 Annual Operational Plan has a species management objective to "supplement trout fishing opportunities with appropriate stocking that is valued, cost effective in terms of the return to the angler and which retains community support". The project planned results are:

- Undertake an annual trout stocking programme which concentrates on creating and maintaining valued lake fisheries;
- Undertake a trial release of 2-year-old trout into the lower Patea River to assess the potential for a long-term programme;
- Undertake monitoring of angler returns from the 2017-2021 releases of tagged brown and rainbow trout into the lower Patea River;
- Operate the Hawera hatchery in an effective, cost efficient and sustainable manner utilising volunteer support to meet the identified stocking objectives.

2. HAWERA HATCHERY

There were 1,212 adipose-fin clipped rainbow trout yearlings from the 2022 year-class held in the Hawera hatchery at the beginning of the 2023/2024 financial year.

An estimated 2,750 brown and rainbow trout fry from the 2023 year-class were also held at that time. These fish originated from 1,000 eyed brown ova and 2,000 eyed rainbow ova received from the Eastern F&G Region's Ngongotaha hatchery on 22nd June 2023 (Figure 1). Sent by overnight courier, the ova went to Hamilton instead of Hawera, but the extra 24 hours of travel didn't adversely affect their subsequent hatching and survival. Rainbow trout from the 2023 year-class were adipose fin-clipped on 28th March 2024, at which time the count was 2,572 fish, meaning that significantly more than 2,000 ova had been received. Brown trout from the 2023 year-class were adipose fin-clipped on 21st May 2024, at which time the count was 836 fish.

A total of 2,000 eyed rainbow trout ova and 1,000 eyed brown trout ova (2024 year-class for 2024/25 release) were received from the Eastern F&G Region's Ngongotaha hatchery on 23rd May 2024. From these ova approximately 2,750 fry were held in the hatchery at year-end (31st August 2024).

A team of nine volunteers ran the hatchery on a daily basis on Council's behalf.

3. RELEASES OF FRY, FINGERLING OR YEARLING RAINBOW TROUT

During the 2023/24 financial year, a total of 3,037 fingerling, yearling and up to 18-month rainbow trout from the 2022 and 2023 year-classes were released into four lakes and three rivers in the region (Tables 1 & 2). The total also included 702 fingerling rainbows that were liberated into two eclosed waters in the Wellington Fish & Game Region (Marton reservoir and a Rangitikei quarry pond).

Releases were made consistent with the release schedules presented to the March 2023 and 2024 Council meetings. In accordance with the Council's Sports Fish & Game Management Plan 2011, and relevant legislation (Conservation Act s26ZM), the Council only releases trout into waters where they already exist.

The total included 703 fingerling and yearling rainbow trout released into the upper Waiaua River near Opunake in September 2023 and April 2024 to help restore the fishery following a major headwater erosion event in the Waiaua mainstem on 17th July 2021.

A total of 722 rainbows were raised through to 17/18 months of age for release into the upper Patea River (300 fish) for a kids' trout fishing promotion, into the lower Patea River downstream of Patea Dam (120) and into the Hangatahua (Stony) River (213) and Lake Mangamahoe (101). Many of these fish were over 1kg. Releases into the Hangatahua River provided good angling opportunity through to mid-April 2024, when a minor headwater erosion event caused the river to run grey with sand and ash for four weeks. Anglers reported seeing fish in the river once it cleared, and fishing has continued during the winter as the fishery is open all year.

For the 2022 year-class, the total number of rainbow trout raised through to release was 1,712 fish (500 released in 2022/23 & 1,212 in 2023/24) from the 3,000 ova received in July 2022. This gave a survival to release of 57.1% (Figure 2), which was about average. However, the total didn't include 1,000 rainbow fry that were released into the Waiaua River on 15th November 2022 and if these are included the survival figure rises to 90.4%

Survival to release for the 2023 year-class is tracking at 113.6% (1,825 released to date and 1,583 held over (747 rainbow & 836 brown).

4. RELEASES OF TWO-YEAR-OLD RAINBOW TROUT FROM NGONGOTAHA

A total of 500 two-year-old rainbows from the Eastern Fish & Game Region's Ngongotaha hatchery were released into Lake Rotomanu on 19th October 2023 (Table 3). These fish cost \$6,339.03 (GST exclusive) or \$12.68 each once transport was included. No outside funding

was obtained for this release, but it could be in the future via an Inglewood Rod, Gun & Recreation Club application to the NZCT or Pub Charity.

Following the release, a family trout fishing promotion was held at New Plymouth's Lake Rotomanu on 28th October 2023 which, while successful in terms of participation, resulted in only a few rainbow trout being caught. Reasons for this are unclear, but the lake outlet grill will be netted off for the 2024 event to ensure fish remain in the lake. The 2023 event was held in conjunction with the Inglewood Rod, Gun & Recreation Club and Taranaki Hunting & Fishing and it was the fourth year that trout were released into the lake rather than corralled in a holding net. Hynds Pipe Systems kindly provided their BBQ trailer for this event.

A release of 120 two-year+ rainbow trout was also made into Sattler's Dam near Raetihi on 26th March 2024. These fish were donated by DOC's Tongariro National Trout Centre. This year there was no evidence of illegal netting or other illegal activity. Thanks to our Raetihi and Waiouru Rangers for keeping a close watch on the fishery following the release.

5. PLANNED RESULTS FOR HAWERA HATCHERY TROUT RELEASES

5.1 Implement an effective trout stocking programme which concentrates on creating and maintaining valued lake fisheries.

As shown in Tables 2&3, hatchery rainbow trout were liberated into five lakes in the region (including Sattler's Dam) during the year. Lakes Mangamahoe and Rotomanu are well used by anglers. Lesser numbers fish Lake Ratapiko, where the annual March/April lake level drawdown reduces fishery productivity. No release was made into Lake Namunamu this year as access has been restricted in preparation for forest harvest over the next 3-5 years. A top-up release to Lake Namunamu is scheduled for April 2026.

Three rivers were also stocked with hatchery rainbow trout during the year. In the case of the Hangatahua (Stony) River, the release of 213 17-month Hawera hatchery rainbows was successful in sustaining a productive and valued fishery in between headwater erosion events.

The release of 300 Hawera hatchery rainbows into the upper Patea River in the centre of Stratford enabled a kids' trout fishing promotion attended by 82 children to go ahead on 2nd December 2023. The release provided ongoing opportunities for local anglers and following 25 years of releases, a wild rainbow trout population is also becoming established in the upper Patea River.

The release of fingerling and yearling rainbow trout into the Waiaua River at Opunake is a temporary measure to promote recovery of the fishery following the July 2021 erosion event.

Previously, rainbow trout released into Opunake Lake had been able to access the Waiaua River via the Opunake HEPS inlet race, but with the power scheme shut down since 1 June 2018 this has not been an option.

5.2 Undertake a trial release of 2-year-old trout into the lower Patea River to assess the potential for a long-term programme and monitor angler returns from the 2017-2021 releases of tagged brown and rainbow trout into the lower Patea River.

In November 2023, 120 Hawera hatchery rainbow trout weighing up to 1.3kg were released into the lower Patea River below Patea Dam as part of a programme to assess whether releasing trout at a larger size increases the return to anglers. During the year there was little feedback from anglers on the success of the releases. Long-standing access to the power station tailrace has been stopped by Manawa Energy following a H&S Audit, denying anglers access to the most popular fishing site on the river.

Following preparation of a report by Fish & Game staff reviewing the 2017-2021 trout stocking in the lower Patea River downstream of Patea Dam, Manawa Energy agreed to fund annual releases of 100 larger 1kg+ rainbow trout and 100 large brown trout from the Hawera hatchery into the lower Patea River for five years (2024 – 2028 inclusive). The review concluded that releasing trout at a larger size will likely provide a better return to anglers and be a more cost-effective approach to mitigation.

5.3 Operate the Hawera hatchery in an effective, cost efficient and sustainable manner utilising volunteer support to meet the identified stocking objectives.

Operating costs for the Hawera hatchery over the period 1 September 2023 - 31 August 2024 came to \$13,212.66 (compared with \$12,119.64 in 2022/23, \$10,680.94 in 2021/22 and \$8,862.29 in 2020/21). This included the cost of trout ova (\$1,466.37), fish food (\$4,750.57), insurance (\$849.49), power (\$732.81), liberation and hatchery expenses (\$2,662.97), fish trailer expenses (\$387.43) and resource consent monitoring fees (\$2,363.02), but excluded staff time. Capital expenditure of \$1,365 for a new hatchery freezer and \$3,216.43 for refurbishment of the fish release trailer were excluded from the total.

With a total of 4,620 trout raised at the hatchery in the 2023/2024 financial year, (3,037 released and 1,583 held over) this put the average cost of raising trout at the Hawera hatchery at \$2.86 per fish. However, in 2023/24 there was \$1,790 of income from a Taranaki Electricity Trust grant to cover the cost of raising trout for the December 2023 Stratford kids' fishing event, which brought the cost per fish down to \$2.47 (Figure 3). This compares to \$3.90 in 2022/23, \$4.27 in 2021/22 (no TET grant) and \$3.03 in 2020/21 (TET grant received) (all figures GST exclusive). So, while total operating costs for the hatchery increased, the larger numbers of fish raised at the hatchery during the year meant that the cost per fish decreased.

\$4.50
\$4.00
\$3.50
\$3.00
\$2.50
\$1.50
\$1.00
\$0.50
\$0.00
2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025

Figure 3 - Cost of trout produced vs year for 2010/11 to 2023/24

While costs continue to rise, the smaller number of fish raised in recent years and rearing some fish through to at least 17-months of age means that fish are now much larger at release, and they will have better survival and higher angling value as a result.

The figure of \$2.47 per fish compares favourably with the cost of purchasing 2-year rainbow trout directly from the Eastern F&G Region (\$7.06 each, plus transport @ \$2.64/km), particularly given that the oldest Hawera fish are much larger at release (1 – 1.5kg compared with 0.5 - 0.8kg).

Having trout available at Hawera retains the flexibility to release fish when receiving water conditions are suitable. As indicated in Section 4, the large Hawera rainbows raised for the Stratford, Stony River and lower Patea River releases would have cost at least \$12.68 each to buy and transport from Ngongotaha.

6. RECOMMENDATION

That the 2023/2024 Trout Liberation Report dated 3rd September 2024, be received.

Allen Stancliff

Senior Field Officer

3rd September 2024

TABLE 1 - Releases of fry, fingerling or yearling rainbow trout into Taranaki Region rivers and lakes during the 2023/2024 financial year. All fish raised at the Hawera hatchery were produced from Lake Tarawera-strain ova received from the Eastern Fish & Game Region.

Water	Release Date	Hatchery Origin	Fish Year Class	Number Released
Lake Mangamahoe	20.09.23	F&G Hawera	2022	175
Waiaua River	20.09.23	F&G Hawera	2022	303
Patea River (lower)	13.11.23	F&G Hawera	2022	120
Stony River	13.11.23	F&G Hawera	2022	100
Patea River (upper)	01.12.23	F&G Hawera	2022	300
Lake Mangamahoe	20.12.23	F&G Hawera	2022	101
Stony River	20.12.23	F&G Hawera	2022	113
Waiaua River	24.04.24	F&G Hawera	2023	400
Lake Mangamahoe	14.05.24	F&G Hawera	2023	303
Wellington Region	16.05.24	F&G Hawera	2023	702
Lake Ratapiko	26.08.24	F&G Hawera	2023	200
Lake Ngangana	26.08.24	F&G Hawera	2023	100
Lake Mangamahoe	26.08.24	F&G Hawera	2023	60
Lake Rotomanu	26.08.24	F&G Hawera	2023	60
Total				
Released				

TABLE 2 - Total number of fry, fingerling or yearling rainbow trout released into each water during the 2023/2024 financial year

Water	Number Released
Lake Ratapiko	200
Lake Mangamahoe	639
Lake Rotomanu	60

Lake Ngangana	100
Waiaua River	703
Stony River	213
Patea River (upper)	300
Patea River (lower)	120
Wellington F&G Region	702
Total Released	3,037

TABLE 3. Releases of 2-year-old hatchery rainbows in the Taranaki Region during the 2022/2023 financial year.

Water	Date	Hatchery Origin	Number Released
Lake Rotomanu	19.10.23	F&G Ngongataha	500
Sattlers Dam	26.03.24	DOC Turangi	120
Total Released			620

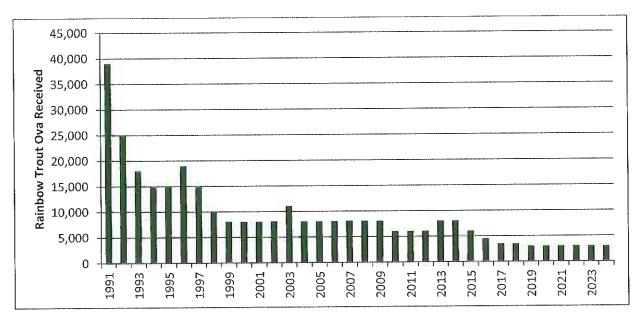


FIGURE 1. Trout ova received at the Hawera hatchery, 1991 – 2024.

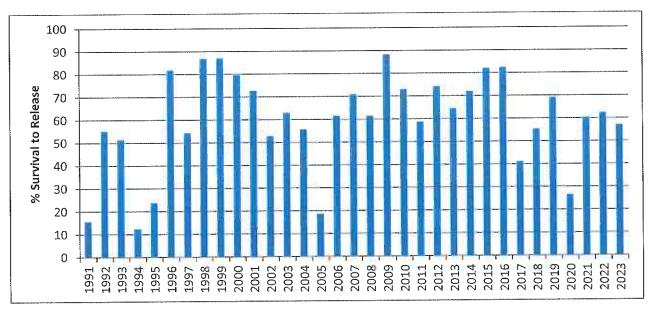


FIGURE 2. Rainbow trout survival to release as a percentage of ova received, 1991 – 2023.

Waimarino and Whanganui Banding Report 2024

Taranaki, Eastern, and Wellington Fish and Game staff annually meet in February to undertake Mallard and Grey Duck banding in the Taranaki region.

This is done in an effort to better understand the movement and survival rates of Mallard and Grey Duck to create more informed management decisions.

This report presents and reviews banding data from 2017-2024, with data gathered from the Waimarino (between 2017-2019), and Whanganui (between 2020-2024).

Allen Stancliff

Senior Fish and Game Officer

Taranaki Fish and Game Council

September 2024



TARANAKI FISH AND GAME COUNCIL

The Chairman

Taranaki Fish and Game Council

Waimarino/ Whanganui Banding Report

For the last eight years in February staff, in conjunction with Eastern and Wellington Fish & Game staff and volunteers, have undertaken a duck banding programme in the Waimarino (2017, 2018, 2019) and Whanganui areas (2020 - 2024). This involved building traps and learning new techniques to develop an effective programme. This has proved successful and in the Waimarino in 2017 we banded 122 grey and mallard ducks at 3 sites (Table 1), 248 ducks at 4 sites in 2018 and in 2019, 148 ducks at 3 sites (a 4th site didn't 'switch-on' that year for unknown reasons).

In Whanganui in 2020 we banded 74 grey and mallard ducks at 2 sites, 289 ducks at 2 sites in 2021 554 ducks at 3 sites in 2022, 567 ducks at 3 sites in 2023 and 383 ducks at 2 sites in 2024. The reduced number of ducks banded in Whanganui in 2024 resulted from a feral cat entering one of the traps, so that none of the 5 traps at the upper site caught ducks on the second day.

We also banded 38 ducks in New Plymouth (Lake Mangamahoe and Te Henui estuary) as part of a bird banding workshop in November 2023.

As part of the programme, hunters were encouraged to return data on any banded ducks they shot either via contact during the gamebird harvest survey, by articles in the F&G magazine, hunting newsletters, newspapers, ezines or through personal contact.

The numbers of ducks banded, and bands returned are summarised in tables 1 and 2.

Table 1. Number of ducks banded 2017 to 2024

Banding Year	Mallards banded	Grey duck banded	Total banded	Banding site
2017	87	35	122	Waimarino
2018	188	60	248	Waimarino
2019	105	43	148	Waimarino
2020	43	31	74	Whanganui
2021	281	8	289	Whanganui
2022	549	5	554	Whanganui
2023	553	14	567	Whanganui
2023 (Nov)	38	0	38	New Plymouth
2024	380	3	383	Whanganui
Total	2,224	199	2,423	

Table 2 shows the percentage of bands recovered for each banding year.

For ducks banded in the **Waimarino** in 2017 – 2019, between 4.4 and 13.7 % of bands have been returned by hunters so far, with no bands returned since the 2022 game season. All of the banded birds reported in 2017 (6) were shot locally, and in 2018 14 out of 16 banded birds (87.5%) were shot in the immediate area (the other two were shot in the Waikato). In 2019, only 66% were shot locally with 3 birds shot in the Ohura catchment and one bird reported from Waitotara (60 to 80km away from where they were banded).

Autumn 2019 was much dryer than preceding years with many ponds dry come opening day. Both the reduced recovery rate of banded birds and also reduced proportion shot locally hints that potentially a number of ducks migrated out of the area possibly due to the dry conditions that prevailed.

In Whanganui (2020 – 2024), the total returns to date have been between 5.9% and 21.4% (Table 2), perhaps indicating that harvest pressure is greater in the Whanganui area than in the Waimarino.

In 2020, 9 out of the 12 Whanganui banded birds were shot locally within the Whanganui area, with another 2 shot in the Waimarino and one in Morrinsville, 265km away from where it was banded.

In 2021, 2 of the 8 banded birds were shot in Whanganui area, 4 were shot in the Waimarino, 1 was shot at Lake Aniwhenua east of Rotorua (175 km from its banding site) and 1 was shot north of Morrinsville (216 km from its banding site).

In 2022, most of the 50 Whanganui band returns were from the local Whanganui area and down into the Manawatu. There appeared to be little movement up into the Taranaki ringplain area, with just one band returned from a duck shot at Kahui Road, some 129km from the banding site.

In 2023, nearly all the 45 band returns were from birds shot in the local Whanganui/Manawatu area, with one shot in Masterton some 123km away and one shot in Taranaki at Upper Dudley Road Inglewood, 122km from the banding site.

In 2024, most of the 84 band returns came from the local area and Manawatu, with two ducks from Whanganui shot at Wataroa Road Pungarehu, some 139km away.

One of the 33 birds banded at Lake Mangamahoe, New Plymouth was shot 185km away at Foxton.

The results currently do not include analysis of recaptures of previously banded birds at the banding sites. For example, on day 1 of banding at Whanganui in 2024, 92 ducks banded in previous years were trapped in addition to the 354 unbanded ducks trapped. This indicates there is quite a high level of fidelity to the banding site (i.e. it's a good place to live).

The landowner has kindly committed to another year of trapping at Whanganui, with banding scheduled for early February 2025.

RECOMMENDATION:

1. That the 2024 Whanganui banding report be received.

Allen Stancliff
Senior Field Officer
26th September 2024

Table 2. Number of bands returned by hunters and the percentage of band returned, 2017 to 2024

Year	Recovered 2017	*	Recovered 2018	×	Recovered 2019	*	Recovered 2020	×	Recovered 2021	85	Recovered 2022	%	Recovered 2023	×.	Recovered 2024	N.	Total % recovered to date
2017	9	4,9	N	4.3*	m	2.7*	0		1	*6.0	1	*6.0	0		0		13.7
2018			12	4.8	9	2.5*	1	*4.0		0.4*	0		0		0		8.1
2019					m	2.1	0		3	2.1*	0		0		0		4.4
2020							11	14.9	+	1.6*	н	1.6*	0		2	*0.0	21.4
2021									2	0.7	∞	2.7*	8	1.1*	4	1.4*	5.9
2022											41	7.4	17	3.3*	14	2.8*	13.5
2023													25	4.4	26	*8.4	9.2
2024															40	9.5	9.5

* Adjusted to account for banded birds shot in previous years

This report covers operational work undertaken within 2023/2024 to disperse and/or control gamebirds that are causing significant damage.

It provides data on the amount of dispersal permits that were issued, the control methods that were used, the location in which dispersal efforts occurred, and the gamebird species involved.

Jilli Steedman

Secretary

Taranaki Fish and Game Council

September 2024





TARANAKI FISH AND GAME COUNCIL

The Chairman

Taranaki Fish and Game Council

2023/2024 Game Bird Dispersal Report

This paper reports on operational activity conducted during the reporting period under project 1181. The objective of this project is to ensure the dispersal or control of congregations of game birds where they cause unacceptable damage.

A total of 72 permits to disturb were issued by Taranaki Fish & Game staff within the reporting period (71 permits issued last year). Note that some of these permits cover more than 1 species. The area with the highest number of permits issued was Taranaki (49) then Whanganui (20) and 3 permits

were issued in the Waimarino. 47 Permits were issued between the months of November and May (47 last year).

Income of \$640 (\$680 last year) for the hire of gas guns was received during the year,

MALLARD

There were 9 permits (11 permits issued 2022/2023) issued for the disturbance of Mallard ducks, causing damage to crops (4 were for only mallards, 5 included Paradise shelduck).

BLACK SWAN

There were 0 permits issued to disturb Black Swan (0 last year).

PUKEKO

49 permits were issued for the disturbance of pukeko, 1 including Paradise shelduck (41 permits issued 2022/2023).

Problem	No. permits issued	Disturbance method used	
Damage to gardens	32	Trip traps (17) Shot gun / .22rifle (15)	
Damage to crops & pasture	6	Shotgun / Gas Gun	
Damage to pasture	4	.22 rifle	
Fouling troughs	5	.22 rifle	
Damage to Xmas Tree Farm	1	.22 rifle	
Attacking Chickens	1	.22 air rifle	

PARADISE SHELDUCK

21 permits were issued for the disturbance of Paradise shelduck (14 were for Paradise shelduck only, 5 including Mallard and 1 including Pukeko. This compares to 23 permits issued 2022/2023.

	No. permits	
Problem	issued	Disturbance method used
Damage to crops & pasture	21	Gas gun / Shot gun

Recommendation

That the Game Bird Dispersal Report – 2023/2024, be received. Jilli Steedman

SECRETARY

10 September 2024

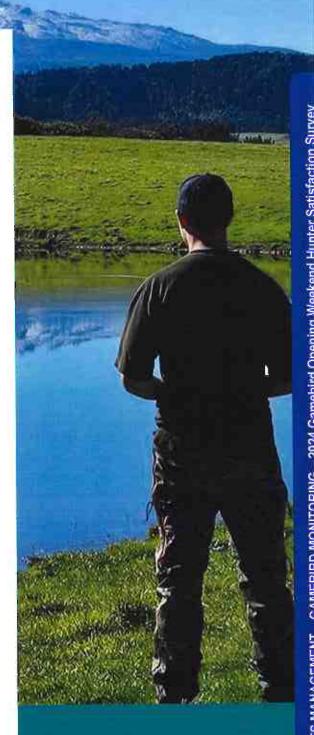
		Method	Species
	Personal Minister Character Services Services and Property Control of the Control	Shotgun/.22 rifle	Pukeko
19/09/2023	Whanganui !	.22 rifle	Pukeko
19/09/2023	Whanganui '	.22 rifle	Pukeko
22/09/2023	Waitara	Shotgun/.22 rifle	Pukeko
28/09/2023	New Plymouth	Trip Traps (1)	Pukeko
7/10/2023		Zon gun	Paradise shelduck/Pukeko
18/10/2023	New Plymouth 4310	Trip traps (3)	Pukeko
3/11/2023	Incommenter and contract of the second secon	Gas gun/Shot gun	Mallard Duck and Paradise shelduck
14/11/2023	Whanganui	Gas Gun	Paradise Shelduck
NO. O TO ESTON #2 PROSPECT NOW A	New Plymouth	Shotgun/.22 rifle	Pukeko
	Whanganui	Gas Gun	:Pukeko
27/11/2023	Commence of a chapter through the same at the record	Shotgun	Paradise Shelduck
	Annual Contract of	Trìp Trap	Pukeko
	Whanganui	Shotgun	Mallard duck
30/11/2023	- Account to the Contract of t	Gas Gun	Paradise Shelduck
***************************************	Whanganui	.22 rifle	Pukeko
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****************	Ohakune	Gas Gun	Mallard duck
	faces and the second se	AMMERICANIES NUMBER INC. III. III. II. II. II.	Paradise Shelduck
4/12/2023		Gas gun/Shot gun	
	Inglewood	Gas gun/Shot gun	Paradise Shelduck
5/12/2023		Gas gun/Shot gun	Mallard Duck and Paradise shelduc
	A	Trip traps (2)	Pukeko
	Lepperton	Gas gun/Shot gun	Paradise Shelduck
12/12/2023	Manala	Gas gun/Shot gun	Mallard Duck and Paradise shelduc
13/12/2023	New Plymouth	Trip Traps (2)	Pukeko
15/12/2023	Stratford	Gas gun/Shot gun	Paradise Shelduck
20/12/2023	Inglewood 4386	Gas gun/Shot gun	Mallard Duck and Paradise shelduc
21/12/2023	COLUMN TO SERVICE CONTRACTOR SERVICES AND AND AND ADDRESS.	Gas gun/Shot gun	Paradise Shelduck
	Hawera 4673	Shotgun/.223	Pukeko
29/12/2023	francisco con an annual annual annual annual and an although	Gas gun/Shot gun	Paradise Shelduck
29/12/2023 29/12/2023		personal control control of the cont	Absorber and the second of the
CONTRACTOR SOUTH			Paradise Shelduck
24/01/2024	A Market American at the Armer San Commission Commission	Gas gun/Shot gun (x3)	
29/01/2024	there are consider the constant of the constan	Gas gun/Shot gun	Paradise Shelduck
	New Plymouth 4312	Trip traps (2)	Pukeko
7/02/2024	Oaonui	Gas gun/Shot gun	Paradise Shelduck
COMMON CONTRACTOR COMMON CONTRACTOR	Whanganui	.22 rifle	Pukeko
7/02/2024	Whanganui	Trip Trap	Pukeko
8/02/2024	New Plymouth	Trip Traps	Pukeko
22/02/2024	New Plymouth 4310	Trip Traps	Pukeko
23/02/2024	Hawera	Shotgun	Pukeko
12/03/2024	Whanganui	.22 rifle	Pukeko
	Whanganui	.22 rifle	Pukeko
AUTOCONOMICO CONTRA CON	Hawera 4672	supressed .22 rifle	Pukeko
		supressed .22 rifle	Pukeko
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*****	New Plymouth 4312	Trip traps (2)	Pukeko
	New Plymouth	Trip traps (2)	Pukeko
27/03/2024	Oakura	.22 rifle	Pukeko
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29/04/2024	New Plymouth	Trip traps (2)	Pukeko
1/05/2024	l Whanganui	.22 rifte	Pukeko
9/05/2024	New Plymouth	.22 air rifle	Pukeko
22/05/2024	New Plymouth	.22 or .223 rifle	Pukeko
	New Plymouth	Trip traps (2)	Pukeko
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mountains an except of the	a day with the second s	.22 rifle	Pukeko
*******	l Whanganui	\$	The second secon
	1 Whanganui	supressed .22 rifle	Pukeko
	New Plymouth	Trip trap (1)	Pukeko
	1 New Plymouth	Trip Traps (2)	Pukeko
12/07/2024	1,Stratford	Gas gun/Shot gun	Mallard duck
17/07/2024	New Plymouth	Trip Traps (2)	Pukeko
23/07/2024	4 Whanganui	.22 rifle	Pukeko
	New Plymouth 4312	Trip traps (1)	Pukeko
	New Plymouth 4372	Gas gun/Shot gun	Paradise shelduck
14/08/2024	property and a second second	Gas gun/Shot gun	Mallard duck
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THE WAY ST	1 Whanganui	.22 rifle	Pukeko
	4 Ohakune	,22 rifle	Pukeko
	Ohakune	:.22 rifle	Pukeko

For the 2024 Gamebird season, Matthew Garrick (NCF&G) and Heather Sanders Garrick (NZC) created a survey for all Fish and Game Regions to utilise to gauge Hunter satisfaction at a regional level.

The survey was standardised for all regions, enabling a comparison of the data from each region at a national level.

This report provides the preliminary results for the Taranaki Region.

Allen Stancliff
Senior Fish and Game Officer
Taranaki Fish and Game Council
September 2024





TARANAKI FISH AND GAME COUNCIL

The Chairman
Taranaki Fish and Game Council

2024 Game Bird Hunter Opening Weekend Satisfaction Survey

In consultation with regions, Matthew Garrick (NCF&G) and Heather Sanders Garrick (NZC) formulated a series of questions about hunter satisfaction, with the objective of obtaining results on a national basis for comparison.

Hunters were surveyed as a part of the annual opening weekend harvest survey, and those who hunted during opening weekend were asked questions about their level of satisfaction with their opening weekend experience and the numbers of mallard duck and paradise shelduck they saw and harvested. They were asked to rate satisfaction on 5-point scale (1 = very dissatisfied, 5 = very satisfied). A total of 991 surveys were collected across 11 participating regions.

This agenda item provides Councillors with preliminary results of the survey.

For Taranaki:

- More than 55% of hunters said they were either satisfied or very satisfied with each aspect of their opening weekend experience;
- More than 80% of hunters said they were either satisfied or very satisfied with their overall opening weekend experience; and
- On average, harvest was lower than hunter expectations.

This is not a bad result considering the region experienced fine, calm weather conditions over opening weekend which favoured the ducks.

Asking the satisfaction questions involved quite a bit of extra work for the harvest survey interviewers and we thank them for their effort and understanding.

RECOMMENDATION:

 THAT THE 2024 GAME BIRD HUNTER OPENING WEEKEND SATISFACTION SURVEY REPORT BE RECEIVED.

Allen Stancliff

18 September 2024

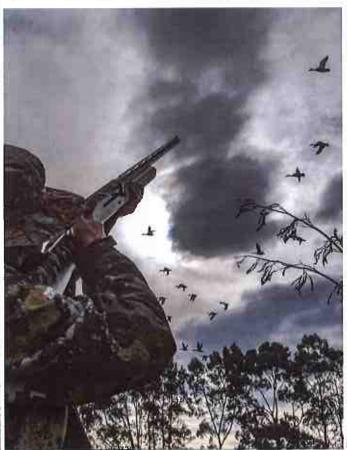


PRELIMINARY RESULTS



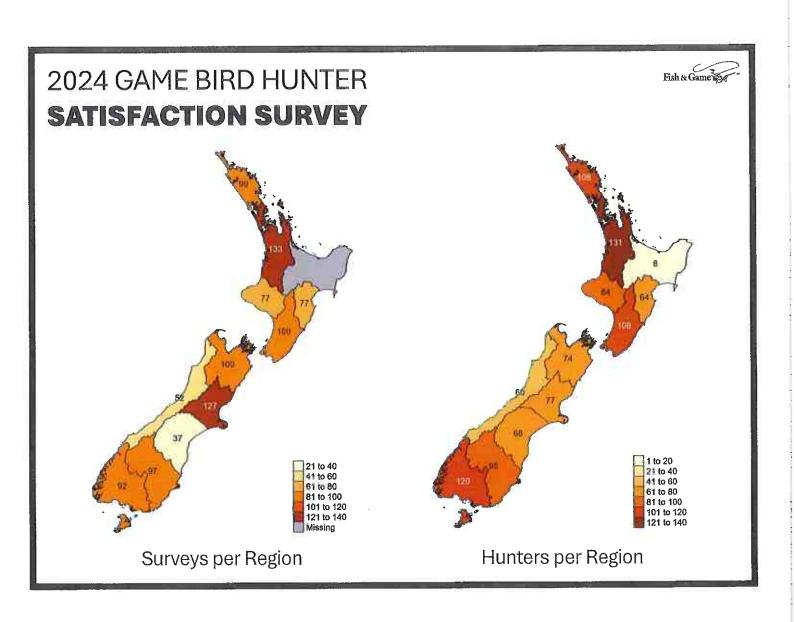
Prepared by Matthew Garrick, North Canterbury Fish & Game and H. Sanders Garrick, New Zealand Fish & Game





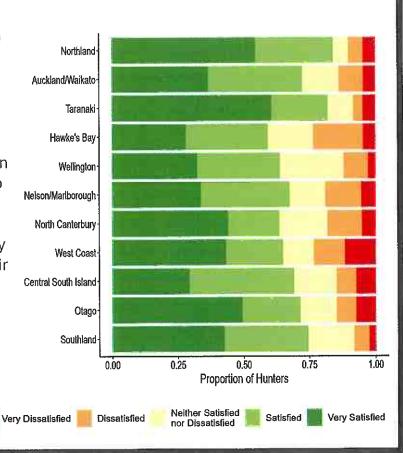
- Hunters surveyed as a part of the annual opening weekend harvest survey
- Hunters who had hunted during opening weekend were asked several questions about their satisfaction with their opening weekend experience
- Asked to rate satisfaction on 5-point scale (1 = very dissatisfied, 5 = very satisfied)
- 991 surveys collected across 11 regions

Photo Credits: Richard Cosgrove, New Zealand Fish & Game



How satisfied were you with your Opening Weekend experience?

- Mean satisfaction was 3.9 (95% CI 3.8-4.0), or satisfied
- Satisfaction was largely similar between regions, with means ranging from 3.6 to 4.3
- More than 70% of hunters reported they were satisfied or very satisfied with their opening weekend experience

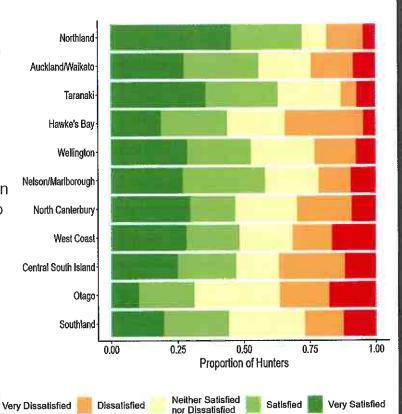


Fish & Game

Fish & Game

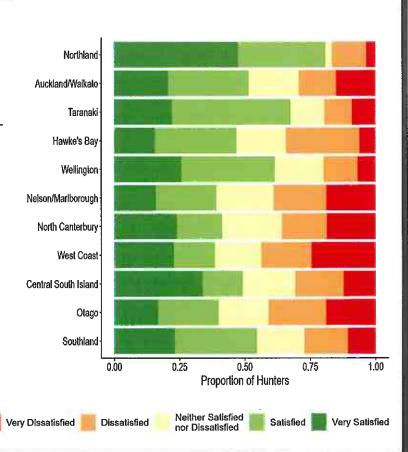
How satisfied were you with the number of ducks you saw in your hunting area?

- Mean satisfaction was 3.4 (95% CI 3.3-3.5), or slightly more satisfied than neutral
- Satisfaction was largely similar between regions, with means ranging from 2.9 to 3.9
- 51% of hunters reported they were satisfied or very satisfied with the number of ducks they saw
- 26% of hunters reported they were dissatisfied or very dissatisfied



How satisfied were you with the number of mallards/grey ducks you harvested?

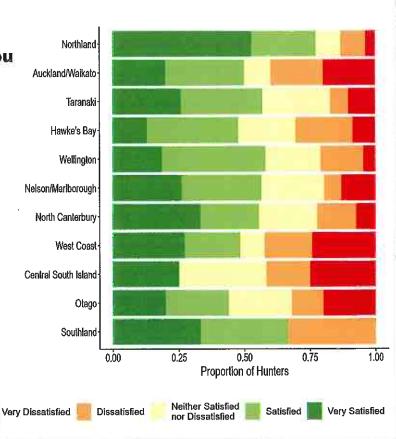
- Mean satisfaction was 3.3 (95% CI 3.2-3.4), or slightly more satisfied than neutral
- Satisfaction varied between regions, with means ranging from 2.9 to 4.1
- 52% of hunters reported they were satisfied or very satisfied with the number of mallards/grey ducks they harvested
- 30% of hunters reported they were dissatisfied or very dissatisfied



Fish & Game

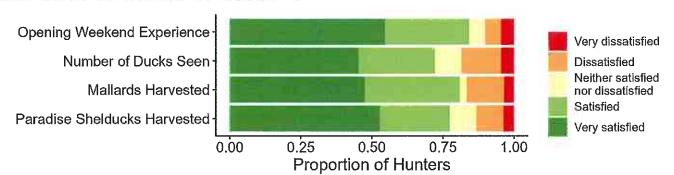
How satisfied were you with the number of paradise shelducks you harvested?

- Mean satisfaction was 3.5 (95% CI 3.4-3.6), or slightly more satisfied than neutral
- Satisfaction varied between regions, with means ranging from 2.8 to 4.1
- 56% of hunters reported they were satisfied or very satisfied with the number of paradise shelducks they harvested
- 25% of hunters reported they were dissatisfied or very dissatisfied

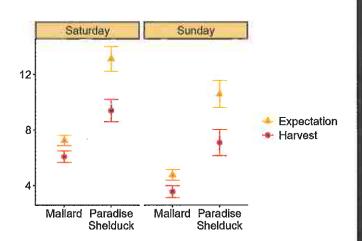


Fish & Game

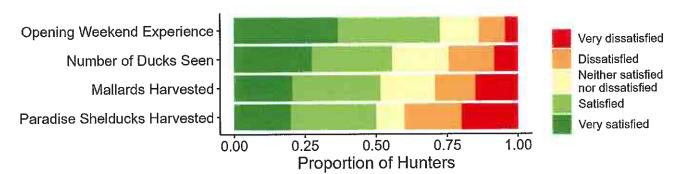
NORTHLAND



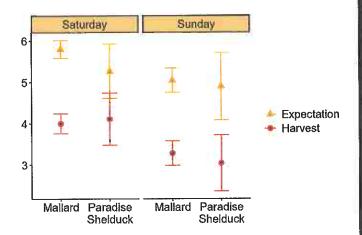
- More than 70% of hunters said they were either satisfied or very satisfied with each aspect of their hunting experience
- Fewer than 5% of hunters said they were very dissatisfied with any aspect of their hunting experience
- On average, harvest was slightly lower than hunter expectations



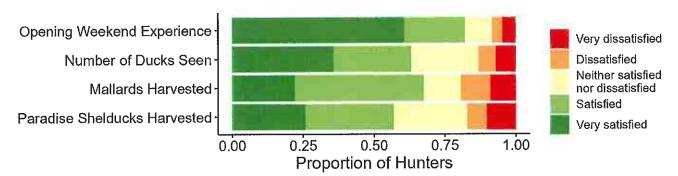
AUCKLAND/WAIKATO



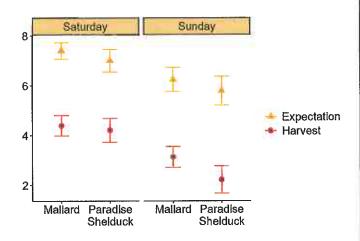
- More than 70% of hunters said they were either satisfied or very satisfied with their overall weekend experience
- 40% of hunters said they were either dissatisfied or very dissatisfied with their paradise shelduck harvest, while only 29% said they were dissatisfied or very dissatisfied with their mallard harvest
- On average, mallard harvest was lower than hunter expectations, and paradise shelduck harvest was slightly below expectations



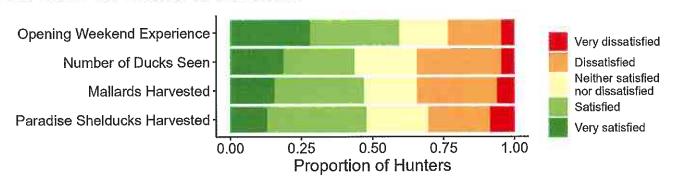
TARANAKI



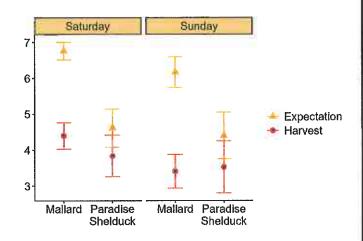
- More than 55% of hunters said they were either satisfied or very satisfied with each aspect of their opening weekend experience
- More than 80% of hunters said they were either satisfied or very satisfied with their overall opening weekend experience
- On average, harvest was lower than hunter expectations



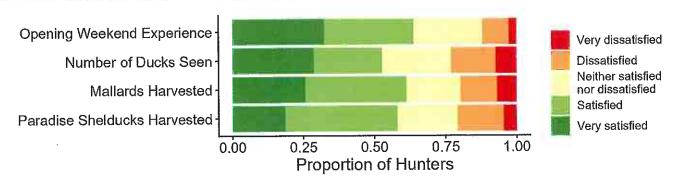
HAWKE'S BAY



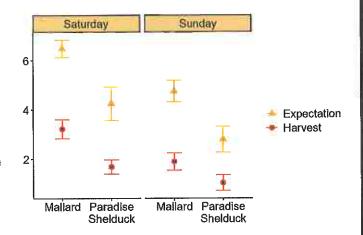
- More than 40% of hunters said they were either satisfied or very satisfied with each aspect of their opening weekend experience and 59% of hunters said they were either satisfied or very satisfied with their overall experience
- 30-35% of hunters said they were either dissatisfied or very dissatisfied with the number of ducks they saw and harvested
- On average, mallard harvest was lower than hunter expectations, but paradise shelduck harvest matched expectations



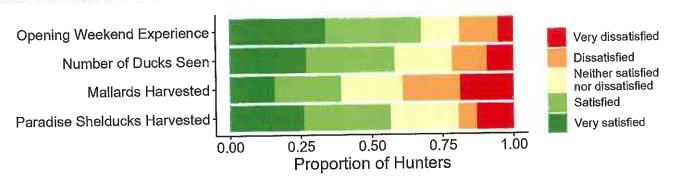
WELLINGTON



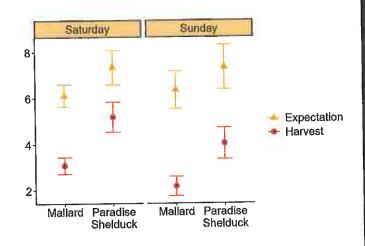
- More than 50% of hunters said they were either satisfied or very satisfied with each aspect of their opening weekend experience
- 20-23% of hunters said they were either dissatisfied or very dissatisfied with the number of ducks they saw and harvested, but only 12% of hunters said they were dissatisfied or very dissatisfied with their overall experience
- On average, harvest was lower than hunter expectations



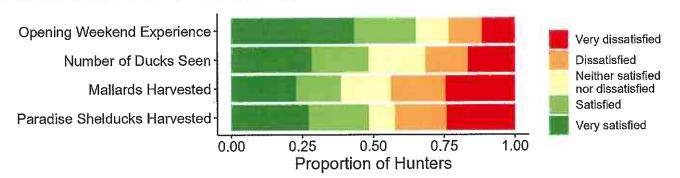
NELSON/MARLBOROUGH



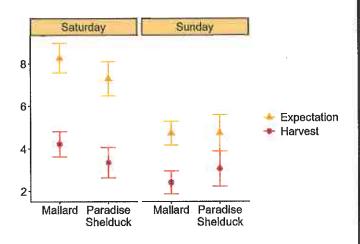
- Nearly 70% of hunters said they were either satisfied or very satisfied with their overall opening weekend experience
- Around 20% of hunters said they were either dissatisfied or very dissatisfied with each aspect of their opening weekend experience except for mallard harvest, for which 40% were either dissatisfied or very dissatisfied
- On average, harvest was lower than hunter expectations



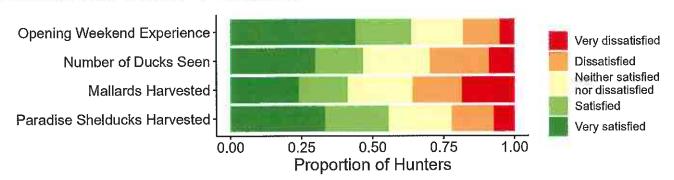
WEST COAST



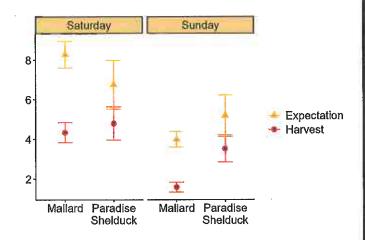
- 65% of hunters said they were either satisfied or very satisfied with their overall opening weekend experience
- Nearly 25% of hunters said they were very dissatisfied with the number of mallards they harvested, and nearly 25% said they were very dissatisfied with the number of paradise shelducks harvested
- On average, harvest was lower than hunter expectations on Saturday, but was more similar to expectations on Sunday



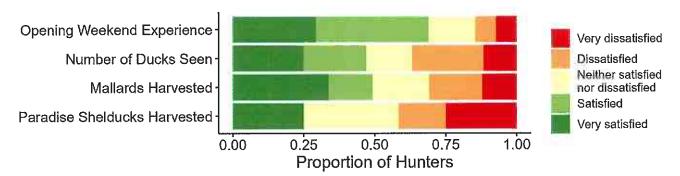
NORTH CANTERBURY



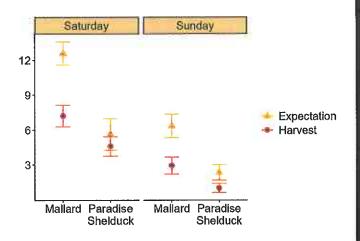
- 65% of hunters said they were either satisfied or very satisfied with their overall opening weekend experience
- Nearly 20% of hunters said they were very dissatisfied with the number of mallards they harvested, and nearly 30% said they were either dissatisfied or very dissatisfied with the number of ducks they saw
- On average, mallard harvest was lower than hunter expectations, but paradise shelduck harvest matched expectations



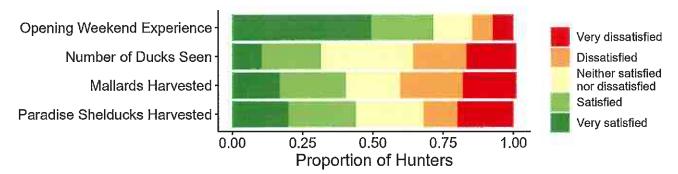
CENTRAL SOUTH ISLAND



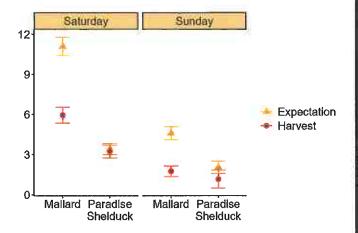
- Nearly 70% of hunters said they were either satisfied or very satisfied with their overall opening weekend experience, and nearly 50% were satisfied with the number of ducks they saw and the number of mallards they harvested
- Fewer than 15% of hunters said they were dissatisfied or very dissatisfied with their overall opening weekend experience
- On average, mallard harvest was lower than hunter expectations, but paradise shelduck harvest matched expectations



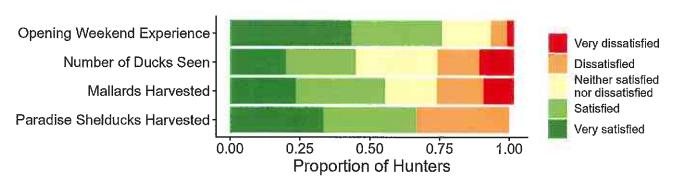
OTAGO



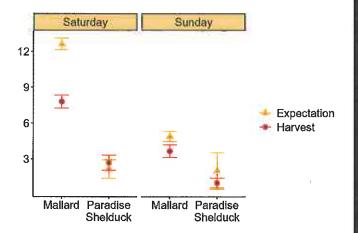
- More than 70% of hunters said they were either satisfied or very satisfied with their overall opening weekend experience
- More than 40% of hunters said they were either dissatisfied or very dissatisfied with the number of mallards they harvested and nearly 40% reported they were dissatisfied with the number of ducks they saw
- On average, mallard harvest was lower than hunter expectations, but paradise shelduck harvest matched expectations



SOUTHLAND



- More than 75% of hunters said they were either satisfied or very satisfied with their overall opening weekend experience
- Fewer than 30% of hunters said they were either dissatisfied or very dissatisfied with the number of mallards they harvested or the number of ducks they saw
- Mallard harvest was lower than hunter expectations on Saturday, but all other harvest matched expectations

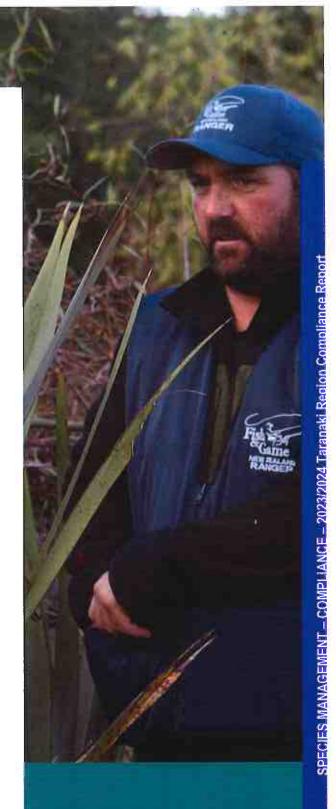


2023/2024 Taranaki Region Compliance Report

This report covers compliance activities for the 2023/2024 gamebird and sports fish seasons.

It reports on Ranger management and training, warrant renewals, and compliance activities, with supporting data.

Allen Stancliff
Senior Fish and Game Officer
Taranaki Fish and Game Council
September 2024





TARANAKI FISH AND GAME COUNCIL

The Chairman

Taranaki Fish and Game Council

2023/24 Compliance Report

The Council's 2023/24 annual plan requires production of a compliance report detailing compliance activities, including ranger management and results for the year.

The planned results for the year in the Council's annual plan were to: review and renew ranger warrants and maintain a skilled honorary ranger team of at least 12 rangers consistent with requirements and objectives of the Compliance Policy and Strategy and also R3 principles; and to undertake safe and effective compliance coverage across the Taranaki Region, including a target of 100 licence checks of anglers and also of hunters. Performance measures were: Ranger warrants renewed as appropriate, rangers trained, safe and effective and number of compliance checks, level of compliance exceeds 95% and outcomes reported of any non-compliance detected.

Ranger management and training

The Taranaki Region began the 2023/24 year with a full complement of 13 warranted honorary rangers and 2 warranted staff. One warranted staff member took extended leave from 25/09/2023 and resigned on 1/07/2024.

Nine honorary rangers and one staff attended a fish season training day in New Plymouth on 30/09/2023. Five honorary rangers and one staff completed a CERT 1-day refresher in New Plymouth on 13/04/2024. One additional honorary ranger completed a CERT 1-day refresher in Hamilton on 27/07/2024.

Ranger warrant renewal

Police vetting, warrant approval applications, honorary ranger agreements and code of conduct and fit and proper person declarations were completed and approved for 10 honorary rangers and one staff. Three honorary rangers decided not to renew their warrants, and we thank them for their service. A new honorary ranger application from a very experienced CERT trainer was approved, bringing the total to 11 honorary rangers and one staff at year's end.

Compliance activities

Rangers checked a total of 62 anglers throughout the region during the season. Six offences were detected, giving a compliance rate of 90.3%. One no-licence offence was dealt with via formal warning. A junior angler found fishing without a licence was dealt with via education (parents contacted). One no-licence offender gave a false name and was unable to be identified. Three young men were found fishing during a close season without licences. They had not held licences previously and were unaware of the regulations.

There was a good turnout of rangers on opening weekend of the 2024 game season, with 65 hunters checked in the Waimarino, Tikorangi and Ratapiko areas. One offence was detected in relation to occupier hunter status, but this was a genuine misunderstanding and was dealt with via education. The overall compliance rate for game bird hunting was 98.5%.

The number of anglers and hunters checked over the year, with offences detected, is shown in Table 1 below. The numbers checked did not reach the target of 100 identified in the Council's Compliance Strategy, but still represented a good effort by rangers, given the dispersed nature of angling in the region and that the Waimarino area targeted on opening weekend of the game season has a relatively low density of hunters.

Table 1 Number of hunters and anglers checked and offences detected over the 2023/24 season

	Number of checks	% of total licences sold (using provisional 2023/24 figures)	Number of offences detected	User compliance rate (%)
Anglers	62	4.0% of 1,548	6	90.3%
Hunters	65	5.7% of 1,135	1	98.5%

RECOMMENDATION

That the Taranaki Fish & Game Council receive this compliance report for 2023/24 noting that:

- management of honorary rangers met the planned result in the Operational Plan;
- compliance checks did not meet the target of 100 for anglers and hunters;
- compliance with the regulations was 90.3% for anglers checked, which did not meet the target of 95% compliance;
- compliance with the regulations was 98.5% for hunters, which exceeded the target of 95%.

Allen Stancliff Senior Field Officer 4 September 2024