Friends of Nelson Haven & Tasman Bay Inc

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Annual General Meeting will be on Tuesday September 2 2025 at 5pm at 29 Bronte Street, Nelson

Among the usual business we will discuss and pass the new rules we have prepared in accordance with the Incorporated Societies Act. **All are welcome.**

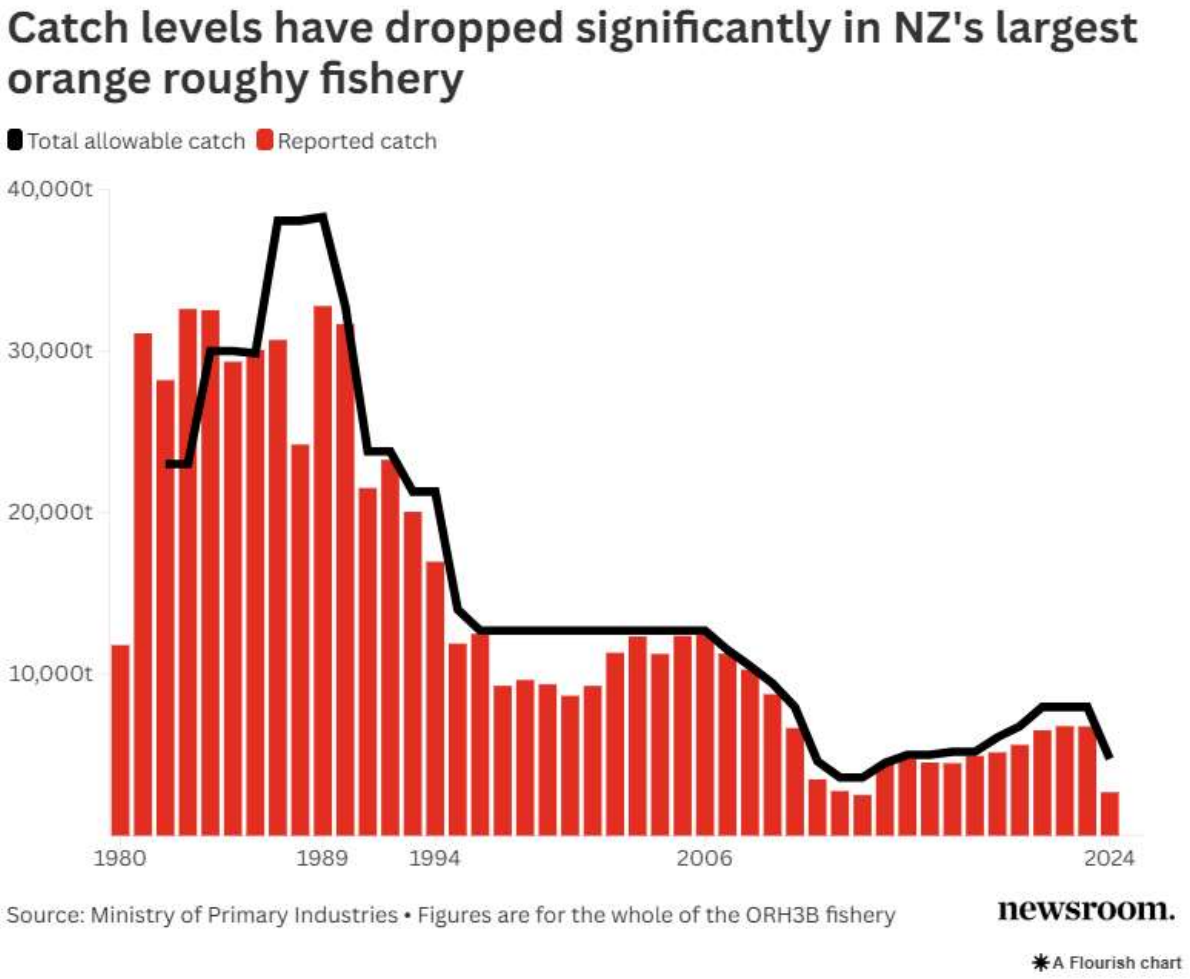
Annual Report July 2024 to June 2025

The **War on Nature** by the present coalition government has been so named by the Royal Forest & Bird Protection Society, Greenpeace and now the Environmental Defence Society (EDS). This also applies to Friends' work of over half a century on coastal conservation. The War extends to the ocean as well. The present government has been stripping away many hard-won environmental protections, the most recent being a bill limiting local bodies from making conservation decisions. Some of Friends' efforts to slow coastal degradation of the Top of the South have been wiped away. Extractive fisheries and aquaculture practices often degrade and destroy the habitat of ocean life from microscopic algae which are the base of the food chain through to sea birds and to the largest ocean beings such as whales and dolphins. Long term effects of these destructive policies are ignored in the rush for the quick buck and the feeling of power. Both the Fast Track Bill and the Treaty Principles Bill are designed to nullify environmental protections.

Government financial support for environmental and conservation efforts by local groups has been removed. Most initiatives for coastal conservation in the Top of the South are by small volunteer groups acting on local needs. Examples are the Nelson's only marine reserve Horoirangi which resulted from a decade of volunteer efforts, Abel Tasman National Park exists due to one of Friends' founding members', Perrine Moncrieff, volunteer efforts. Our own group stopped Nelson Haven/Paraoroa from being further infilled and many other coastal insults (see The Story of Friends of Nelson Haven on our website). Friends' thirty-year efforts related to aquaculture have set many national precedents and are now being made irrelevant.

A major government decision to extend the duration of existing marine aquaculture consents by 20 years has a major impact on the Top of the South. This was opposed by environmental groups on grounds of adverse effect on marine life and unknown effects of climate and ocean warming. It also ignores many hard won Environment Court decisions. There is little or no funding to monitor or enforce conditions in any case.

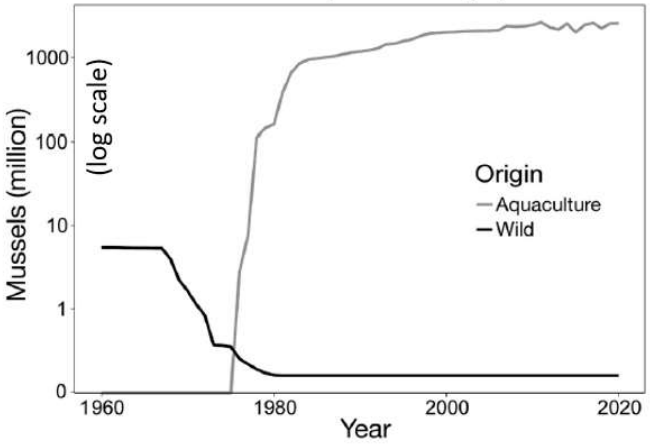
On the Fisheries reforms - we agree with the Environmental Defence Society: "Several proposals would weaken existing sustainability controls by giving the Minister wider discretion to set catch limits while removing scientific constraints." A case in point is the orange roughy, a slow growing fish (lives to over 200 years, matures at 25-30 years) caught by bottom trawling where they congregate on Chatham Rise sea mounts. Stock assessments show fish numbers are on the verge of collapse. The further bad news is that the bottom trawling has destroyed some of the essential breeding and feeding habitat of this fish, so regeneration is reduced or worse. Below is a graph of orange roughy catch 1980 – 2024 using MPI data, from Newsroom July 8 2025



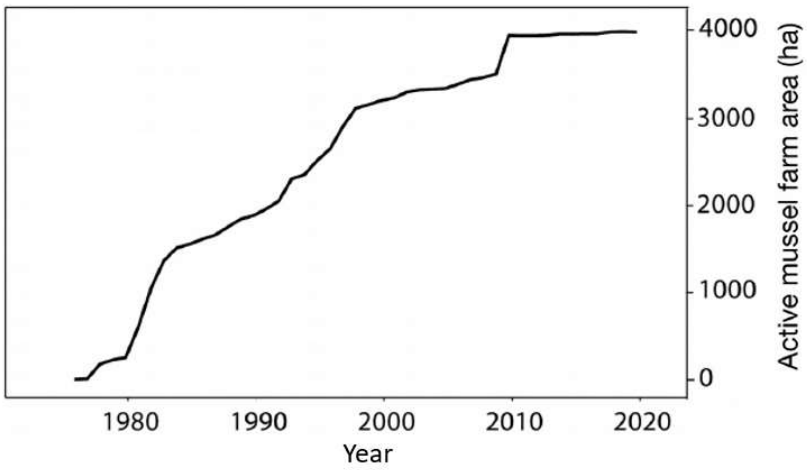
These scenarios are not new and are what happened to some of the world's biggest fisheries such as the Peruvian anchovies and the North Sea cod. Locally, in the 1970s, the same thing happened to Tasman Bay snapper, natural beds of scallop, mussel and oyster, followed by dramatic depletion of Chatham Islands rock lobster due mainly to Nelson fishers. The snapper fishery has been slowly recovering, but in 45 years it has not recovered to pre-70s amounts. Thanks to sedimentation and re-suspension many snapper food species are now gone.

Mussel aquaculture is especially relevant to Top of the South with Marlborough Sounds providing 70% of the national production. The graphs on the next page show that mussel aquaculture started in the 1970s and quickly reached a plateau and then did not increase. Production was 90,000 tonnes per year. The area used has doubled every few decades. If this happened on land, farmers would have to increase their land area constantly. Unthinkable on land and yet done in our coastal zone commons and assumes that the zone is infinite. It is finite. The current management is not sustainable. A person from the Blue Economy asked if Friends was opposed to aquaculture. Friends want aquaculture practices to be sustainable over the long term. One suggestion is to learn from the lessons of millions of years which have resulted in long term sustainability and a multi species highly productive coastal ecosystem.

Mussel populations at aquaculture sites compared with wild mussels on the seabed or shoreline. A log scale for the Y-axis is used to account for the extreme differences between wild and aquaculture populations.



Total area of active mussel aquaculture in the Marlborough Sounds by year



From: Toone, Benjamin, Handley, Jeffs & Hillman. *Expansion of shellfish aquaculture has no impact on settlement rates.* Aquaculture Environment Interactions, Vol 14 pp 135–145, 2022

A. Research and Educational Projects Support

King Shag research continues to be central to Friends' efforts to slow the extractive, degrading coastal activities in Marlborough Sounds. Friends is supporting further research into this species which is endemic to the Sounds. By studying the feeding habits of King Shag it became evident that the birds cannot move to new areas in part because their ability to dive for food on the sea bed depends on how long they can hold their breath and hence are limited to areas of depth. Food in deeper waters is inaccessible, hence the endemism. The King Shag studies are on several levels, and will be able to indicate the status of the present population. Multi-year studies are especially important.
The following two research projects are supported by Friends:

A. 1. King Shag Feather Analysis

Friends is funding research on the nutrition level of King Shag using feather analysis. Birds moult each year and grow a new set of feathers, so studying feathers provides a snapshot of the bird's health and diet when the feathers are growing during the moult period. Two study methods are being used on feathers from present-day colonies across the Sounds as well as feathers from museum specimens from known dates and colonies. The work is being done by NIWA and Canterbury University. Feather gathering and raw data analysis has been carried out, and we await the interpretation. In the meantime this is how the two methods work.

Ptilochronology method: Daily growth bars occur along the length of a feather and the spacing of these indicates the nutritional status of the bird. Evenly spaced bars are produced when the bird is consistently consuming nutritional prey, while shorter bars or those of inconsistent width occur under nutritional stress.

Stable Isotopes method: Stable isotopes are non-radioactive, naturally occurring forms of the same element having different atomic weights. Nitrogen has two such isotopes 15N and 14N and the ratio of these in a sample is referred to as δ15N. Similarly carbon has stable isotopes 13C and 12C and their ratio is called δ13C.

Primary producers at the bottom of the food chain employ one of two photosynthesis pathways, and these pathways each result in a different δ13C ratio in the plant tissue. In the marine environment benthic algae produce tissues with a higher δ13C than do pelagic phytoplankton. In animals further up the food chain the δ13C ratio of the diet is more or less preserved in the animal tissue (for δ13C you are what you eat). So the δ13C ratio in an animal's tissue tells us about the environment, or mix of environments, at the base of that the animal's food web.

On the other hand for nitrogen, the δ15N ratio in tissues increases as you go up the food chain, because the lighter 14N isotope is preferentially processed or excreted by the body. So the trophic level, or position in the food chain, of a bird can be determined from the δ15N ratio of its tissue. The optimum diet for a bird is consuming prey at its preferred trophic level. If it is forced to eat less nutritious prey of a lower trophic level it will become stressed.

However there is a complication with using the nitrogen method. When an animal is stressed or starving, it internally consumes some of its own body tissues. So that using a simple δ15N ratio tissue analysis it will appear that the animal is higher up the food chain than it is, as effectively part of its diet is itself. This produces a far rosier picture of the animal's health than reality. However there is a way around this by using Compound Specific Isotope Analysis of Amino Acids (CSIA-AA). Amino acids are the building blocks of all proteins. Some amino acids an animal's body can make for itself but others it must get from its diet. The latter are called essential amino acids. By doing the δ15N ratio analysis on specific amino acids which are made by different chemical processes in the body or got directly from the diet, it is possible to get a more accurate idea of the animal's trophic level and stress status.

A.2 King Shag Banding and Re-sighting

Banding and re-sighting of king shag chicks is being done at several colonies by Toroa Consulting in a joint project of Friends and the Marine Farming Association. Sites focused on are Tawhitinui, Duffers Reef, and Treble Tree Point. This work will build on the work previously done at these colonies and is aimed at answering the questions on juvenile survival to breeding, age of first breeding, annual adult survival and inter-colony movements. These data are essential to be able to work out a sound population model. So far, field work is complete with three years data having been collected. Analysis has yet to be done and will be reported at a later date.

Other Project Involvement:

A.3. Seagrass studies.

Friends continues to support the study by Cawthron of NZ's only native seagrass (*Zostera muelleri*). They send us regular updates, which are readily available to the public online. See https://www.cawthron.org.nz/research/our-projects/seagrass-restoration/ . Of special interest is their publication of how to grow seagrass in your local estuary.

A.4. Educational projects

Friends supports the Tasman Bay Guardians (TBG) in their educational work with students. Thirty Nayland College students plus two teachers participated in the Love Rimurimu/seaweed project – a first for the South Island (Te Waipounamu). They also had a seagrass collection day in the area they are monitoring. TBG also organised an Experiencing Marine Reserves (EMR) for a Nelson Intermediate School group which resulted in two tamariki chosen to go to Poor Knights Marine Reserve. How good is that?

B. Nelson/ Wakatu City Council (NCC) area.

B. 1. The Nelson Biodiversity Forums of NCC and its Marine subgroup each meet 4 times a year and committee members usually attend. Out of this there is a regular newsletter with an extensive survey of information about the Top of the South coastal. This can be accessed via https://tasmanbayguardians.org.nz/tasman-bay-marine-matters/

B. 2. The Nelson Marina Master Plan manager Nigel Skeggs consulted with Friends. The Plan has received a Clean Accreditation.

B.3 Nelson City Council's Tuku 25 had about 60 contributing events and Nelson Science Society chose the theme of conservation and asked four speakers to contribute including Friends. Gwen and Margot gave a power point presentation of the past and current story of our organization. This presentation can be shown again if anyone wishes to see/hear it.

B.4 Finfish farming trials - Wakatu Inc, based in Nelson, Kono aquaculture assets have been sold to Talleys Group Inc and Plant & Food Research has used the Fast Track 2024 Act to bypass all Environment Court conditions. The snapper and salmon trials will proceed west of D'Urville Island in the Marlborough District Council area of Tasman Bay. To our knowledge this is the first time a native vertebrate species is to be "farmed" either on land or water.

B.5 New wetland – We hear that NCC is establishing a wetland along the style of the Waimea River delta on part of the Wakapuaka area.

C. Tasman District Council (TDC) area

C.1. Friends continue to attend Waimea Inlet Forum meetings.

C.2. The Mapua boat ramp controversy is not settled and Friends' last year's submission stands.

D. Marlborough District Council (MDC) area

D.1. Proposed Marlborough Environmental Plan (pMEP) – Friends' appeal on biodiversity provisions

The Friends appeal on biodiversity provisions of the pMEP attempted to direct specific recognition of the Marlborough Sounds as important habitat for seabirds, and in particular the endemic King Shag.

The specific relief sought included full identification of King Shag breeding and roosting sites as ecologically significant marine sites and with appropriate buffer area protections; amendments to the Appendix 3

criteria to ensure that transient use of foraging habitat by rare but highly mobile species, such as the King Shag, did not disqualify such habitat from being assessed as significant; recognition of relevant Important Bird Areas as mapped by Forest & Bird within the MEP; and protection of foraging habitat for the King Shag from benthic contact fishing activities through a discretionary activity consent rule.

Through an extensive mediation process, satisfactory outcomes were achieved for all of the relief sought, apart from the fishing activities relief. The Court found after a preliminary hearing close to the scheduled substantive hearing that the specific relief sought was not sufficiently identified in the Friends original submission (although clarified through subsequent information exchanged with the Council) and Friends were only able to seek relief which came within the scope of clarifying or consequential relief on protection of King Shag habitat. This was achieved through a consent memorandum which resolved the appeal.

D.2. Proposed Marlborough Environmental Plan (pMEP) – Aquaculture Chapter

Background:

Under the proposed new plan, the old Coastal Marine Zones (CMZ1 and CMZ2) will be replaced by a single CMZ. Within this the Marlborough Sounds and Cook Strait are divided into 45 Coastal Management Units (CMUs) based on catchments, key features, and values (natural character, ecology, social, economic, navigation and Iwi). Within each CMU, taking into account these values and the location of existing marine farms, Aquaculture Management Areas (AMAs) were mapped out where marine farming was deemed appropriate. The AMAs are located between 100m and 300m from the shore. Previously marine farming was allowed between 50m and 200m of the shore, so the AMAs have allowed for an extra 50m of farm width, as well as siting the farms in greater water depth where droppers can be longer. This represents a very big expansion in crop-line volume permitted for existing marine farms.

Outside of AMAs, but within enclosed water or near shore Coastal Management Units, marine farms are a prohibited activity. However it would be possible to apply for a plan change to create a new AMA. In offshore Coastal Management Units (outside the Sounds and beyond 500m of the shore, ie Cook Strait), marine farms are a discretionary activity (Council has full say when assessing a resource consent application).

In Friends' opinion there was not enough scientific work done on the effects of marine farms on the marine environment, eg concerning zooplankton, nitrogen recycling, benthic effects and ecological aspects of this activity, before these allocations were made. And there does not seem to be any prospect of such being done in the near future. These concerns were expressed by Rob Schuckard as a dissenting view in the Marlborough Aquaculture Review Working Group (March 2017- August 2019).

Added to this, the current government in 2024 gave all marine farms an automatic extension of their existing permits:-

From ***Resource Management (Extended Duration of Coastal Permits for Marine Farms) Amendment Act 2024***

The expiry date of the coastal permits to which this subpart applies is extended to whichever is the sooner of—

(a) the date that is 20 years after the date on which the permit would otherwise expire; and

(b) 31 December 2050.

Friends' Participation:

There were of course appeals to the proposed plan both from parties wanting a tightening up and parties wanting a relaxing of restrictions. Friends did not appeal, but did join 5 appeals as an s274 party:-

ENV-2023-CHC-61 Marine Farming Assoc and Aquaculture NZ. This appeal concerns general rules, objectives and policies in the pMEP, not specific to particular marine farms. Mediation was held and lot of rewording agreed on. Friends felt little was gained.

ENV-2023-CHC-62 Marine Farming Assoc. and ENV-2023-CHC-63 Clearwater Mussels Ltd. These two appeals by different parties both relate to various marine farms, and to benthic assessment requirements. When locating AMAs the benthic habitat (sea floor), an ecological value, must be assessed. Marine farms should not be located where they can damage good benthic habitats like reefs, biogenic habitats, cobble habitats or algae beds, with shell drop and pseudofaeces. In siting AMAs for some existing farms it was found that a broader benthic assessment was required before these farms could be reconsented. Relevant farms were listed in a schedule. In these appeals the appellants sought to have particular farms removed from the schedule, so broader benthic assessments were not required. Various environmental and residents' groups, including Friends, joined as s274 parties with particular interests in protecting the benthos of some sites of existing farms. The result of mediation was some farms being removed from the schedule, and for others the appellant had to withdraw that appeal point. From Friends point of view mediation was partially successful in protecting valuable habitats.

ENV-2023- CHC-64 David Hogg & PB Partnership. Pig Bay, Port Gore. Over the last decade Friends and other groups have succeeded, via the courts, in getting removed all but one of the previous marine farms in Port Gore, a prohibited area for marine farming in CMZ1. With the final farm the commissioner decided that the farmer be granted a further 2-year consent, but the farm must be gone when that consent expires in February 2025. In the pMEP there is no AMA for it in the enclosed water CMU of Pig Bay. But since the farm currently exists council placed it in the schedule requiring benthic assessments. The marine farmer appealed this placement. After mediation the farm remained in the schedule.

ENV-2023- CHC-66 Marlborough Aquaculture Ltd. Blowhole Point. Blowhole Point is located at the western side of the entrance to Pelorus Sound and is deemed to have high Outstanding Natural Feature or Landscape (ONFL) value. At present there are a few marine farms there, and in the proposed plan there have not been sited any AMAs within the near-shore Coastal Marine Unit (CMU) in which they lie. This means that when their current resource consents expire the farms will have to be removed as they are in a prohibited area. However, in an effort to "bend over backwards" for the marine farmers, in mediation the council suggested that as the near-shore CMU of the farms is adjacent to the offshore CMU of Cook Strait, a little CMU boundary wiggling could be done. This could place the farms in the open-water CMU where marine farming is a discretionary activity and an application to keep the farms could be made. Needless to say the appellants were happy with this. It was a totally disappointing outcome for Friends, but to challenge it we would have to pursue litigation. Considering the resource consents of the farms have just been extended for 20 years (as described above) and now expire in 2050, we have decided against it.

E. Acknowledgements

1. The voluntary work of committee members is essential and makes the above possible. Friends exists due to the dedication of these people - as is true of many volunteer groups.

2. Member support is also essential and very much appreciated. We also very much appreciate your donations

3. The pro-bono and reduced-fee work by various experts and legal counsel is essential and is very much appreciated.

4. We work collaboratively with many groups and individuals and this is essential and much appreciated. These include Guardians of the Sounds, Kenepuru & Central Sounds Residents Association and Marlborough Environment Centre.

5. Much appreciated is the financial help from the New Zealand T-Gear Charitable Trust.

Respectfully submitted,

Dr. Gwen Struik with help from committee members.