

Community – Kea Project Plan

Nelson Lakes and Murchison

Funded by: Department of Conservation Community Fund (DOC Community Fund)

Period: 1 December 2015 – 30 November 2017.

Key Contact: Andrea Goodman (phone: 0210394214 email: goodman.henderson@gmail.com)

Aim

The aim of the Community – Kea Project Plan is to i) facilitate long-term community kea conservation initiatives and ii) to change the way we think, act and live with kea in our communities. This will be actioned through development of collaborative Community – Kea Project Plans across the South Island. Each community plan will address concerns specific to the local community and threats to the resident kea population.

Project Background

This initial project plan outline has been developed as a result of discussions with communities during the Kea Conservation Trust's (KCT) Winter Advocacy Tour - 20 July – 3 August 2015. The tour was funded by Dulux and supported by Department of Conservation (DOC). The tour theme, "Building a future with kea", aimed to promote a new MOU between communities and kea. This initiative is in line with the new Strategic Plan for Kea Conservation (refer attached document), objective 3: to i) increase positive perceptions of kea and reduce conflict and ii) facilitate formation of community led kea conservation initiatives.

Local Community – Kea Project Plans will be activated by two Community Engagement Coordinator's (CEC's) based in the following areas:

1) Upper half of the South Island: Northern region (Nelson/ Motueka/ Kahurangi), Central North (Nelson Lakes/ Murchison/Arthur's Pass/Christchurch/Mt Hutt) and upper West Coast (Greymouth and Hokitika). There is also the potential to include Kaikoura at a later date (the eastern most population of kea).

2) Lower half of the South Island: Lower West Coast (Franz/Fox Glaciers and Haast), Central South (Mt Cook, Wanaka/Mt Aspiring and the Routeburn/Dart/ Queenstown areas) and Fiordland (Te Anau/ Milford/Murchison mountains).

Each project plan, will be developed in detail over the next two years and will involve creation of an active volunteer network and facilitation of funding streams (external and internal). The plans will take into account eight threats, actual and potential, to the wild kea population which have been identified by kea researchers.

- 1) Predation by introduced mammals
- 2) Lead in kea habitat (e.g. flashings and lead-head nails, tyre weights, lead shot)
- 3) Poorly-deployed pest control devices (e.g. poison baits and traps laid for pest control and aerial 1080 operations)
- 4) Avian diseases
- 5) Climate change (e.g. changes in predator abundance, food availability and habitat quality)

- 6) Accidents with human objects (e.g. motor vehicles, snow groomers, rubbish bins, electricity sub-stations)
- 7) Destruction/removal of nuisance individuals (permitted or illegal)
- 8) Illicit trade in wildlife

Threat focus and mitigation will be area and resource dependant and take into account community interests, expertise and support.

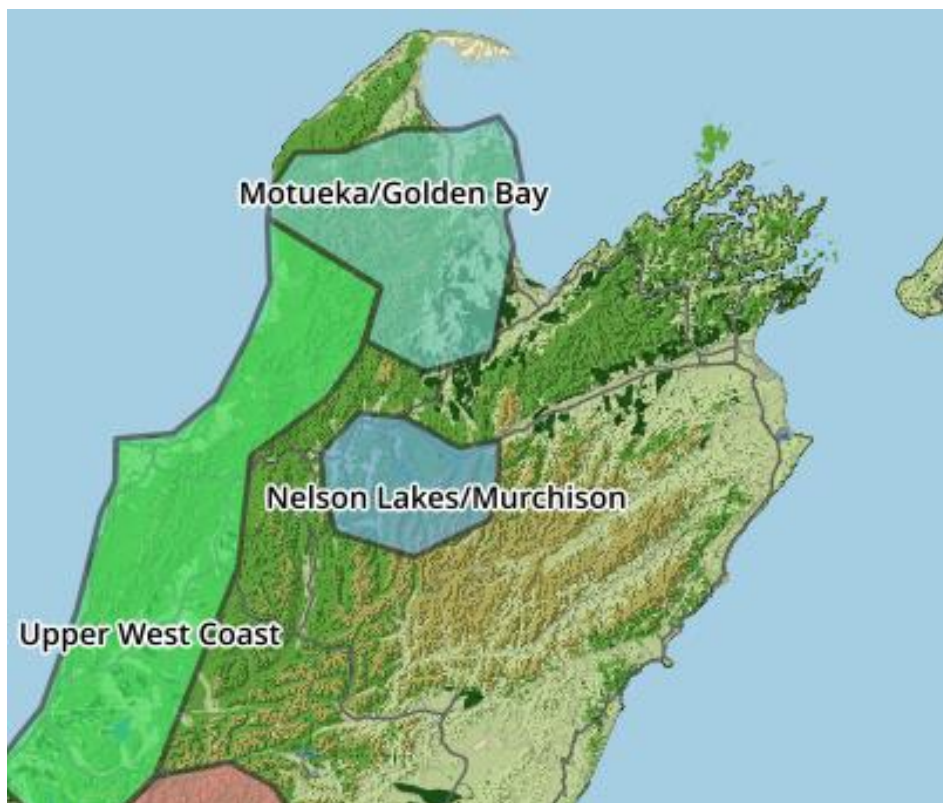
Nelson Lakes and Murchison

Nelson Lakes National Park is situated in the northernmost ranges of the Southern Alps. The park encompasses 101,733 hectares. St Arnaud village, on SH63, is the gateway to the park, located 1 hour and 30 minutes from either Blenheim or Nelson, and 40 minutes from Murchison in the west.

The area is very popular with holiday makers over the summer, with the population increasing from about 100 locals to over 2000 (visitors and bach owners). Skiing at Rainbow Ski field is very popular over winter, with the field open between late June and mid October. In its heyday in the mid 1990's, visitor numbers during the season at the ski field were as many as 38,000 (Van der Heide, 2010).

Murchison is a small town (approximately 500 people) located on State Highway 6 - halfway between Nelson and Westport. Surrounded by native bush, farming, significant rivers and forestry, Murchison is a popular spot for a stop off for travellers. The visitor centre in Murchison records up to 25,000 visitors annually (Arnold, 2014).

Figure 1. Approximate location of area relating to this plan



Nelson Lakes Conservation Efforts

The Rotoiti Nature Recovery Project (RNRP) was established within the Nelson Lakes National Park in 1997 as one of six 'mainland island' projects established by the Department of Conservation. From Kerr Bay, the 'island' extends along the eastern lake shore and up to the St Arnaud Range. Assisted

by the Friends of Rotoiti – FOR, a volunteer group, over 5000 hectares of beech forest in the mainland island is managed. The Friends of Rotoiti have offered to make trap boxes to further support trapping efforts in the area.

In 2014/2015 DOCs ‘Battle for our Birds’ pest control programme was implemented at Nelson Lakes National Park and Rainbow Conservation Area. This was a pest control operation (aerial 1080) in response to an exceptionally heavy beech seed fall event – mast. The pest control covered 8924ha in Nelson Lakes. DOC treated more than 600,000 hectares nationally in the Battle for the Birds programme, and monitored 48 kea through the aerial 1080 operations. Four of the 48 kea died from 1080 poisoning (Department of Conservation, 2015). Continued monitoring and research is necessary to better understand and direct kea conservation.

Table 1. Location of conservation work carried out by conservation groups in the Nelson Lakes and Murchison area

| Group | Location | Activity | Trap numbers | Focal species |
|-------------------------|---|---|--|--|
| Friends of Lake Rotoiti | | | | |
| DOC | Nelson Lakes NP (Raglan, St Arnaud and Robert Ranges), Big Bush Conservation Area, Fyfe (Kahurangi NP) and many other areas for e.g. goat control and weed work | Pest control, pest monitoring, threatened species monitoring, seed monitoring, weed control, biosecurity, research, advocacy. | 907 stoat traps RNRP 313 possum traps, RNRP 159 double set stoat traps- Fyfe 87 stoat traps around kea nests 94 possum traps around kea nests Rat and wasp bait stations RNRP | Kea, kaka, whio, GSK, mistletoe, <i>Pittosporum patulum</i> , Powelliphanta snails. Many other birds benefit from conservation work. |
| Murchison | | | | |
| University of Otago | | | | |
| KCT | Nelson Lakes (Raglan, St Arnaud and Robert Ranges); Kahurangi NP | Summer Surveys/catch trips (2009 – present), Nest monitoring (2009 – present); nest protection Rotoiti 2012- present) | | kea |

Nelson Lakes / Murchison Kea

The Nelson Lakes region has a long history of kea research. Kea were first studied in the 1990’s by the Department of Conservation and Otago University. During this time, the kea population was considered stable (Kea Conservation Trust, 2015). Recent surveys by the Kea Conservation Trust

(2009-2012) of the Nelson Lakes kea population (covering an area of 14,000ha), have shown a decline of approximately 80% in the number of breeding pairs (Kea Conservation Trust, 2014). Nest monitoring and protection, and research have identified predation by possums and stoats and lead poisoning to be major threats to kea survival (Kea Conservation Trust, 2015).

This area continues to be a valuable study site for kea. Nest monitoring, surveys of resident kea and predator control is carried out on an annual basis on the Raglan, St Arnaud and Robert Ranges. In addition to this, approximately 60,000 people annually go through the Department of Conservation Lake Rotoiti Visitors Centre (Gabriella Czoma pers comm.). The area provides the opportunity to study population dynamics (as there is long term population data), behaviour and general ecology. Given the proximity to the Rainbow Ski field and forestry harvest operations, the area provides a unique opportunity for community involvement in threat mitigation projects and kea-human conflict resolution.

Much of kea – human contact within this area is centred at the Rainbow ski field. Kea are also encountered on the National Park walking tracks, car parks (e.g. Mt Robert), huts and nearby forestry logging operations. Kea have been seen on occasion at Kerr Bay (near the St Arnaud township). Kea have also recently been visiting Murchison (2015) in large groups of up to 18 birds.

Summer survey work, kea nest monitoring and predator control (battle for our birds) in Kahurangi National Park will be having an impact on the kea population around Murchison. In 2012/2013, a kea radio-tagged on Mt Owen was later located in Murchison and then Springs Junction before returning to Kahurangi.

The area surrounding Nelson Lakes National Park and Murchison generally comprises native bush, forestry and farming. Reports of conflict have been made from logging sites and private property within the wider Nelson Lakes area (eg Kerr Hill, Golden Downs, Kikiwa, Mt Tutaki and Murchison).

The Nelson Lakes / Murchison area is potentially a high risk site for kea as they come into direct contact with humans and their property. Kea have been injured or killed as a result of vehicle incidents, illegal shooting, lead poisoning, electrocution, ingestion of foreign materials, and interaction with pest control devices/poisons. As a result it is thought that the average lifespan of local kea may be lower than more remote areas. In addition to this, there are minimal DOC funds available for wildlife response (ie. to transport birds to local veterinary facilities, or to pay for treatment). Any injured kea handed into DOC are either euthanised (or released to die 'naturally' in the wild) or are passed on to Halifax Vet Centre (who work with Natureland Zoo) . There is no consistency when it comes to deciding the fate or treatment of individual birds and there are no funds to reimburse volunteers for expenses incurred. DOC are currently working on an injured bird response document to provide more consistency on decision making.

Project Plan Focal Areas

Discussions with the community and researchers over the years as well as recent meetings through the Winter Advocacy tour, Murchison Community talk, Department of Conservation and via kea-conflict 'call-outs' has highlighted the following areas locals wish to get involved with regarding kea conservation:

- i) Identification and reduction of local threats (pest control, nest protection, trap boxes, lead poisoning)
- ii) Kea advocacy
- iii) Kea conflict resolution and support

- iv) Development of kea protocol for the South Island forestry sector working in kea-country
- v) Injured kea protocol

These focal areas may be added to in the future.

i) Identification and reduction of local threats

Identification of threats and perceptions of kea in Murchison Area

Aims - To assess and identify the current status of kea around Murchison. This would include establishing threats, anecdotal population information (both historical and current).

Funding - DOC Community Fund for Community Engagement Co-ordinator (KCT).

Pest Control – Support and expand local pest control efforts to support kea

Aims

a) Look to increase the volunteer pool to support the current predator control initiatives in the Nelson Lakes and Murchison area (currently run by Friends of Rotoiti and Department of Conservation).

Development of a sustainable volunteer programme (with associated advocacy programme) to support local pest control efforts. The CEC will work with local communities and interested stakeholders (e.g. Friends of Rotoiti etc) to develop this list and help coordinate with conservation groups as required. Due to the environment volunteers will be required to work within, this programme will require careful assessment and coordination of volunteers, and development of robust training and health & safety plans.

Funding - DOC Community Fund for Community Engagement Co-ordinator (KCT).

b) Extend trapping area in Nelson Lakes (including Raglan Range) to protect known kea nest cavities.

Funding – Nelson Lakes Nest Protection fund and crowd sourcing.

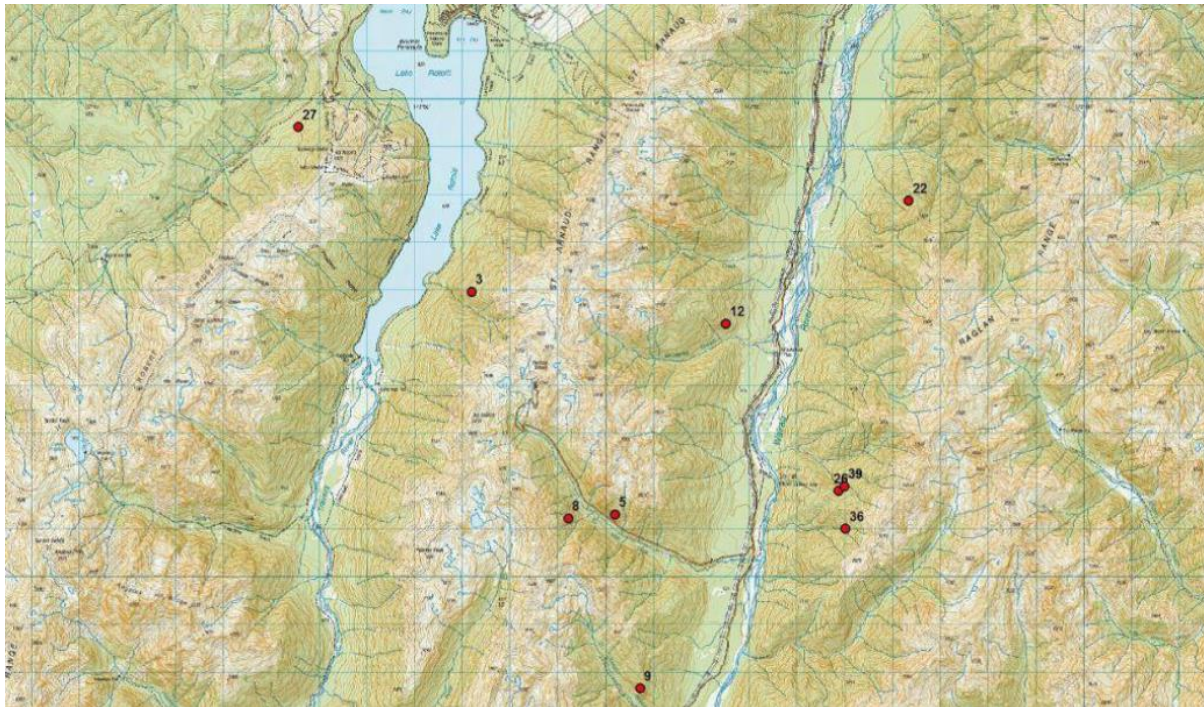
Removal of Lead - Support removal of lead from buildings within Nelson Lakes and Murchison.

Aims - This project will look to

- a) identify the status and presence of lead within the Murchison area
- b) support local initiatives in removing all lead from local buildings, ski fields and throughout huts in conservation areas in and around Nelson Lakes National Park and the wider area
- c) provide alternative materials (tech screws and flashings) to replace the lead removed
- d) support safe disposal of old lead.

Funding - Initial development of the local area project (including identifying who has information on locations of buildings with lead, potential local volunteers (individuals and groups)) to be undertaken with DOC Community Fund monies. Funding partners for alternative non-toxic materials and technical support to be secured (this is currently being investigated as part of a South Island wide project).

Figure 2. Location of current kea nests in Nelson Lakes National Park (Mosen, 2014)



ii) Kea advocacy/education

Aims - To increase public awareness of the endangered status and threats to kea, and reduce the incidence of inappropriate behaviour and conflict.

Method - Main education points to cover;

- a) kea are more endangered than people realise and fully protected,
- b) no feeding of kea,
- c) conflict resolution and
- d) call to action. This will be achieved through the following methods:

- Supply of kea education resources to the Department of Conservation Partnership Rangers and local schools (Lake Rotoiti and Murchison Area)
- Development of appropriate resources for local ski fields
- Development and delivery of interactive kea talks by kea personnel (targeting school and tourist groups)
- Promotion of kea sightings reporting (via website or phone app)
- Promotion of kea proofing database and conflicts programme
- Use of the kea diversionary frame on the Rainbow Ski field road – set up for Battle for our Birds in 2015 – supported by Friends of Rotoiti

Funding – this project will be funded through the DOC Community Fund – Community – Kea Project Plan.

iii) Kea conflict resolution and support

Aims - Ensure Kea Conservation Trust personnel are available for immediate support and advice for those having conflict issues with kea, including the updating of the kea proofing database.

Funding - This project will be funded through the Community Conflict Resolution Programme (KCT) funded by Cincinnati Zoo and Botanical Gardens and DOC CCPF.

iv) Development of kea protocol for South Island forestry sector operating in kea-country

Aims - This project will look to create an education pamphlet for forestry staff and crew who work in areas where kea may be present. Currently many forestry crews in the Nelson Lakes / Murchison area are visited by kea. At times, kea can cause conflict by interfering with, and damaging logging equipment. This pamphlet would look to include information on kea ecology (such as nesting, dispersal, behaviours, threats etc...) and ways to kea-proof logging equipment.

Funding – this project will be funded through the DOC Community Fund – Community – Kea Project Plan and written in consultation with Forestry Companies.

v) Care of Injured Kea

Aims -To support and develop initiatives in the care for injured kea.

Method - Natureland Zoo in Nelson (021449639) is happy to provide initial care for injured kea within the Nelson/Tasman area. In addition to this a fund is to be set up to take donations to support volunteer efforts to access medical care for injured kea. This will be driven by the KCT and be used for the following purposes:

- Reimbursement of travel costs (petrol) on production of receipt/s;
- Purchase of any equipment for the support and transport of injured kea
- Development of veterinary register (list of local vets able to provide initial and long-term medical support for kea)
- Process for transporting kea to specialist veterinary facilities (Massey University (Palmerston Nth), the Nest (Wellington Zoo)), Vet Ent (Queenstown) or the South Island Wildlife Hospital (ChCh));
- Develop local SOP with community stakeholders for dealing with injured kea

Funding – potentially through crowd sourced funding (as per the Arthurs Pass initiative). A funding plan to be set up to assist this.

Development of Injured kea SOP will be supported through the DOC CCPF Strategic plan funds and DOC Community Fund Community - Kea Project Plan.

References

Arnold, Naomi. 2014. Cuts leave Murchison in suspense. <http://i.stuff.co.nz/nelson-mail/lifestyle-entertainment/weekend/9756796/Cuts-leave-Murchison-in-suspense>

Department of Conservation. 2015. Battle for our Birds Programme protects native species. <http://www.doc.govt.nz/news/media-releases/2015/battle-for-our-birds-programme-protects-native-species/> April 2015.

Kea Conservation Trust. 2015. Rotoiti Kea Protection Plan – 2014 (updated). Intensive pest control and monitoring to protect nesting kea in Nelson Lakes National Park.

Kea Conservation Trust. 2015. Removal of Lead throughout Kea habitat. Report to the Kea Conservation Trust.

Mosen, C and Orr-Walker, T. 2014. Kea Monitoring 2013-2014, Kahurangi, Nelson Lakes, Hawdon Valley and Otira. Report for Kea Conservation Trust.

Van der Haide, Maike. 2010. A New Rainbow. <http://i.stuff.co.nz/marlborough.express/features/focus/3891865/A-new-Rainbow>