

All about kea – a framework to focus kea conservation initiatives.

Focal Areas -Projects & Activities

Focus Area 1. Population size, trends and dynamics are understood.

1.1 Estimate Numbers and measure trends

- Project: Develop Kea Survey Tool for measuring relative abundance using observations of back-country users (Josh Kemp, George Moon, Laura Young).
- Project: Import existing treeline survey data from DOC's MSAccess Kea Database to the Kea Survey Tool (Josh Kemp, George Moon).
- Project: Design statistical analysis and reporting for Kea Survey Tool and report preliminary analysis of treeline survey data (Liam Bolitho, Josh Kemp).
- Project: Exploratory/preliminary analysis of existing datasets from automatic call recorders to assess utility as a tool for indexing relative abundance of kea (Vacant).

1.2 Understand kea population dynamics

- Project: Publish population model integrating all available information on survival rates and productivity rates. Use model to assess different management approaches and identify factors influencing population trends (Josh Kemp, Laura Young).
- Project: Publish data on kea movements from satellite transmitters that have been deployed on kea (Erin Kennedy, Nigel Adams, Corey Mosen, Josh Kemp)
- Project: Maintain and promote kea sightings database. Improve knowledge of kea movement ecology, longevity, local recruitment, etc, by colour banding kea and using web app to harvest sightings of banded birds (Laura Young, George Moon).

1.3 Understand the genetic structure of the population (present and historical) across the species range.

- Ongoing activity: Keep informed of developments in conservation genetics and their possible application to kea conservation (Bruce Robertson, Nic Dussex -TBA).

Focus Area 2. Threats to kea are identified and actively managed

A Threats Management Plan is developed.

2.1 Threats and their management are identified and quantified

2.1.1 Introduced mammalian predators & their control

- Project: Measure impacts of feral cats on kea survival in edgy eastern forests in North Canterbury (DOC, Josh Kemp, Laura Young).
- Project: Measure impacts of feral cats on kea survival in edgy eastern forests in West Otago (KCT, Tom Goodman).
- Project: Improve understanding of kea survival through aerial 1080 in remote sites especially at first time treatments (DOC, Jamie McAulay)
- Project: Write a Position Statement on aerial 1080 for posting on KCT website (Tamsin Orr-Walker, Laura Young)
- Ongoing Activity: Stay informed of DOC's landscape-scale predator control programme with regards to kea conservation (Tamsin Orr-Walker, Laura Young) and provide information on KCT website (Josh Kemp).
- Ongoing Activity: Update best practice / recommendations for kea-safe ground based pest control (Tamsin Orr-Walker, Corey Mosen).

2.1.2 Lead in kea habitat

- Project: Identify and engage groups (including DOC maintenance) to remove and safely dispose of lead from buildings in the kea range (Andrea Goodman, Laura Young).
- Project: Identify kea with high blood lead levels and facilitate their treatment (Laura Young).
- Project: Identify sources of lead (building materials vs lead shot), through isotope testing (Lydia McLean).
- Project: Investigate how reliable an indicator of lead poisoning, blood lead testing is (Lydia McLean).
- Project: Investigate whether lead is passed from adult females through to their chicks (Lydia McLean).

2.1.3 Feeding kea

- Project: Develop a position statement on kea feeding and initiate progress towards legislation change in the Wildlife Act (Laura Young, Andrea Goodman).

2.1.4 Avian diseases

- Ongoing Activity: Devise protocol for sampling. Oversee implementation and data capture (Kate McInnes -TBA).

- Ongoing Activity: Stay informed of potential disease risks to kea (Kate McInnes-TBA).

2.1.6 Climate change

- Ongoing Activity: Map distribution of invasive animal species (including pigs) in alpine zone. Assess effect of climate on distribution.
- Ongoing Activity: Stay informed of potential threats to kea and their habitat through climate change.

2.1.7 Human induced injury and death

- Project: Develop a database to log kea injuries, deaths and causes (to ascertain prevalence and risk of certain items/areas/situations)
- Project: Collate local-level databases to build a national database which records all kea deaths and injuries and keep this updated (Laura Young, KCT, DOC, Wildlife Hospitals, local communities).

2.1.8 Destruction/removal of nuisance individuals

- Project: Develop a consistent method of identifying and dealing with 'nuisance individuals' with DOC and other stakeholders.

2.1.8 Black market wildlife trade

- Ongoing activity: Work with wildlife trafficking organisations (DOC, CITIES), to identify and stop illegal trade of kea.

2.2 An insurance population is investigated

- Ongoing activity: Investigate insurance population options for kea (ZAA, DOC, KCT).

Focus Area 3. Positive public perception and awareness of kea is increased amongst all stakeholders

A community engagement plan is designed, implemented and evaluated.

3.1 Increase positive view, understanding and knowledge of kea

- Project: Identify channels, tools and methods to spread kea conservation messages (KCT)
- Project: Develop local action plans through an on-going community engagement programmes (KCT)
- Project: Develop interpretation and advocacy material to address specific threats to kea and raise positive awareness in general (KCT)
- Project: Evaluate success of advocacy methods and messages (DOC, KCT)

- Project: Utilise citizen science powertool, the Kea Sightings Database to engage and educate the public, researchers and any outdoor recreationalist about kea conservation and ecology.

3.2 Proactively engage with mana whenua

- Project: Identify, develop and strengthen relationships with mana whenua throughout the South Island (Andrea Goodman).
- Ongoing: Ensuring mana whenua are updated and included in kea conservation initiatives, project development and outcomes (Andrea Goodman).

3.3 Proactively engage with communities to transform conflict

- Project: Develop and maintain a conflicts database (Andrea Goodman).
- Project: Prepare an advice package for people with conflict issues (Andrea Goodman).
- Project: Research methods of conflict transformation (Andrea Goodman).
- Ongoing activity: Continue updating and promoting online public kea proofing database (Andrea Goodman).

3.5 Increase education and research opportunities

- Project: Develop curriculum based education material for schools which reflects current understanding of kea (Core Education, Wellington Zoo, Cassie Crawford, Tamsin Orr-Walker).
- Project: Provide a list of projects which could be developed by specialist organisations (KCT).
- Ongoing activity: Guide and support externally driven projects

3.6 Facilitate the formation of community led kea conservation initiatives

- Ongoing activity: Develop and nurture an active volunteers database and programme (Annika Werner).
- Project: Identify and support kea conservation initiatives (national and international), which are consistent with the objectives of the KCT (Tamsin Orr-Walker).

Focus Area 4. The captive population is actively managed to increase welfare, education, advocacy, and research potential.

5.4.1 Ensure best practice welfare and husbandry standards of all kea permit holders

- Ongoing activity: Support robust auditing of permit holders.
- Ongoing activity: Regular review and updating of kea husbandry manual standards to incorporate current research (DOC, ZAA, KCT).

5.4.2 Develop effective advocacy messaging to support kea in-situ

- Project: Develop and deliver kea advocacy plan with consistent messaging across all stakeholders (ZAA, DOC, KCT).

5.4.3 Support education and research to support in-situ conservation initiatives

- Ongoing activity: Ensure education and research to support in-situ conservation initiatives is part of the permit process.