Integrated Conservation
The in-situ/ex-situ bridge

Dr L Roberts: Unitec and The Kea Conservation Trust
Fact:
Studies now conclude extinction rates for fauna and flora to be between 1000 and 10,000 times background rates.
Fact:
Out of 85,604 species assessed by IUCN (2016), 24,307 are listed as threatened.
Only 5% of the total number of species have been assessed.
Fact:
There are 100,000s of animals representing many thousands of species held in captivity around the world.
Fact:
Many species have been saved from extinction using collaborative ex-situ/in-situ experience, skills and resources.
A survey conducted by the World Association of Zoos and Aquariums, in collaboration with national and regional zoo and aquarium associations, showed that annually more than 700 million people visit zoos and aquariums worldwide and are thus potentially exposed to environmental education.

The number of visitors to zoos in the USA and Canada exceeds the combined annual attendance of baseball, American football and hockey (Hanna, 1996: 76).

**Facts:**

**Biophilia** – Edward O Wilson
“Today more and more of us live in cities and lose any real connection with wild animals and plants.”

Sir David Attenborough, 2004
Petting Zoos
Fun for the whole family.
What is integrated conservation?

“CONSERVATION”
(as defined by WAZA)
Securing populations of species in natural habitats for the long term.

What is integrated conservation?

As zoological professionals who care for animals as our core function, it is critical that we give highest priority to increasing our commitment to the conservation of wild populations.
Integrated Conservation

- Conservation based themed exhibits
- Interpretation and engagement
- Education programmes
- Associate shops and catering facilities with conservation programmes
- Raise funds to support field conservation projects or programmes
Integrated Conservation

- conduct or support appropriate scientific research, both in the field and in the zoo
- appropriate breeding in collections, breed to release, reintroduction and translocation programmes
- advising on behaviour, diet and welfare standards;
- establishing and supporting field conservation units;
Population Management

Zoos Must Ensure that their populations are:

- **demographically stable**;
- **healthy, well maintained and capable of self-sustaining reproduction**;
- **distributed among several institutions to lessen the risks of catastrophic loss**;
- **of sufficient size to maintain high levels of genetic diversity**
**ONE PLAN APPROACH**

*Definition*: Integrated species conservation planning that considers all populations of the species (inside and outside the natural range), under all conditions of management, and engages all responsible parties and resources from the start of the conservation-planning initiative.

**INTEGRATED SPECIES CONSERVATION STRATEGY**

Conservation action for managed populations (including those in zoos and aquariums)

Conservation action for populations in the wild

**Common Goal**
Viable populations of species thriving in healthy ecosystems.
One Plan Approach
What can integrated conservation do for Kea?

- Insurance population
- Breed to release
- Translocation
- Vet care
- Research
- Advocacy/Education (in the zoo)
- Education in schools
- Fund raising for other organisations and projects
- Provision of volunteer field staff
What potential barriers exist for integrated strategies for kea?

- Lack of understanding of what ex-situ can do
- Different philosophies between ex-situ and in-situ industries
- Lack of coordination/structures/strategies to link in-situ to ex-situ
- Sharing of funding
- Ownership of projects
- Unsure where all captive birds are
What do we need to do or know to make this work?

- Who wants to be involved?
- What are the capabilities of the stakeholders?
- What are the priorities for kea conservation?
- What is the best strategy of resource usage to gain the most effective outcomes?
- What’s the best way to consult with all stakeholders?
- Panel discussion?