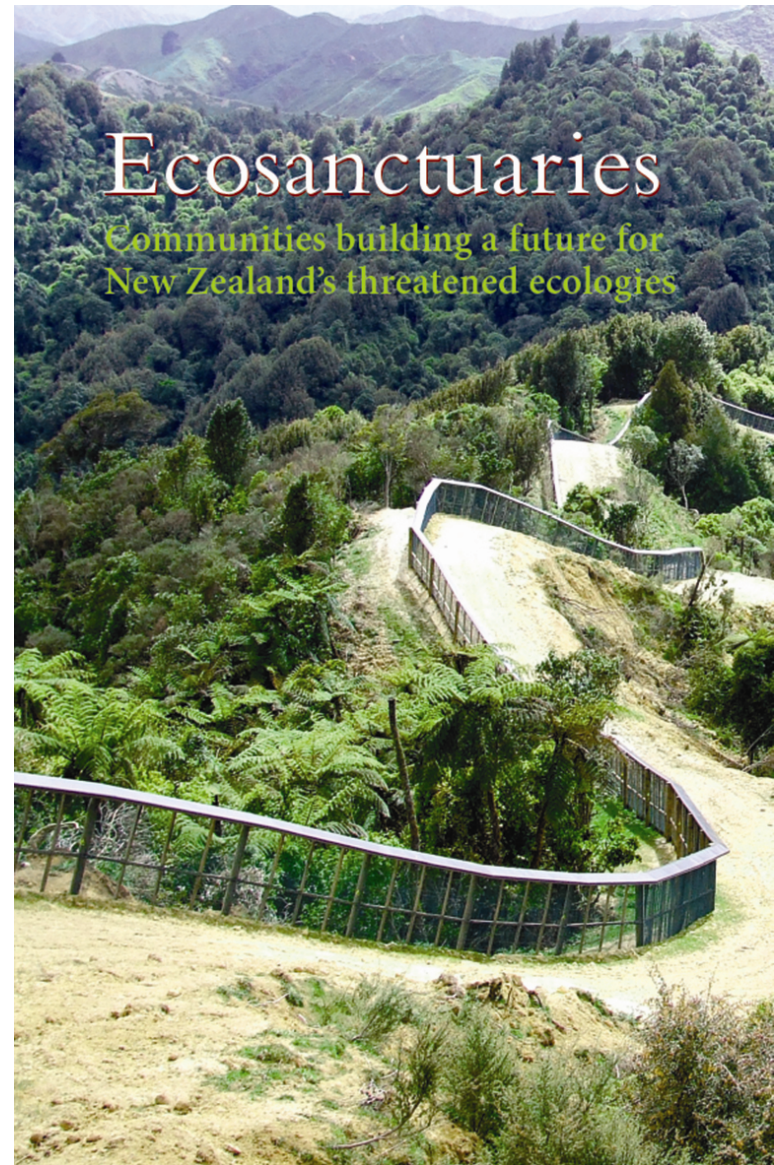


Community-led Ecosanctuaries

Nurseries
for the restoration of NZ
ecologies
to the mainland?

Or sad museums
For the last survivors?



Otago University Press – September 2013

Diane's research



The questions

Community-led mainland fenced sanctuaries offer a dramatic new model for restoration of **NZ's threatened ecologies**

Does this new model have a future? Is it sustainable?

Can **community support** be sustained?

Is there a viable **economic basis** for these ventures?

How will they relate to **government's** conservation efforts?

Three inter-dependent sustainability challenges ecological – social - economic



Illustration – Katherine Campbell-Hunt

Research Case Studies

Aim to create a pest-free environment through the construction of a mammal-exclusion fence

A formally constituted community-based organisation

Fence construction is complete

100 hectares or more in size



Interviews

	Bushy					
	Park	Karori	Maungatautari	Rotokare	Tawharanui	Total
Individuals interviewed	12	9	15	9	9	54
Trustee/committee member	7	6	10	5	3	31
DoC staff	2	1	3		1	7
Sanctuary staff	3	4	2	2	1	12
Iwi	1	1	1	1	1	5
Local body politician/staff		1	4	1	3	9
Volunteer			2	1	1	4
Other	1					1

Building the story – first steps

55 hours of interviews transcribed

Read and re-read interviews to extract statements that can be given a distinct meaning – a ‘code’

For example – ‘sanctuary as a tourist attraction’:

It'll be very vibrant. Lots of people. And it'll be a real tourist Mecca.

I would like to see it on the real map for Wanganui, that when you come to Wanganui if you are here for half a day it is one of the things to do

Interview questions and resulting 'database'

Open-ended questions	Wordcount of extracts
Long-term vision for the sanctuary	10131
Personal motivations	4813
Sanctuaries' role in the New Zealand conservation scene	15280
Factors contributing to success to date – establishment phase	27746
Factors contributing to success to date – building social support	28923
Relationships between sanctuaries	9157
Ingredients for sustainability	88476
Risks and uncertainties	35249
Tensions and back-up	16290
540 codes	236065



A sustainable ecology



Vision is ecology

Topics	Ecology	Social	Economic
Long term vision	5770	2994	1367
Role in NZ conservation	3936	7562	3782
Relationship between sanctuaries	175	2813	6344
Totals	9706	13369	11493

Wordcount of extracts on vision and sanctuaries' future role

The Vision – personal motivations

The reflection of the bush [on the lake at Rotokare] early in the morning. What's sort-of driven me ... is to get down there early and see the reflection and hear the kokako coming across the water. Until that has been achieved I'm not stopping.

I love birds. I adore them. ... if I see wood pigeons flying over our place, which I do almost every day, I'll turn the bike off and we can get really close to them, and have a little chat to them. I don't tell most people that.

The Vision – personal motivations



The Contribution – islands of sanctuaries

Islands are so much cheaper

No need for a fence

Or for centuries of ceaseless effort to keep the bad guys out

Offshore islands give us the biggest bangs for our bucks, probably, at the moment, from the save-the-species side of it.

A single fence is worth probably pretty much what most [DOC] area offices budget ... for a year, for all their work! ... So whilst the funding is coming out of the private sector ... then fine.

The Contribution – sanctuaries of islands



The Contribution – sanctuaries of islands

They [sanctuaries] certainly have a role with getting the public in touch with a lot of species that are otherwise confined offshore, and I think if we want public support for conservation ... people need to be able to go and see some of these things because otherwise it will become kind of an abstract thing that sits on an island offshore somewhere and why should anybody care.

It's the contact that people like ... Because I still come back to the first time I held a kiwi chick. It was only about 400 grams. Once you have made that you are hooked.

The Contribution – sanctuaries of islands



Sanctuaries' distinctive contribution

Sanctuaries direct contribution to conservation and restoration is not their most powerful and important contribution to the cause

Their indirect contributions
advocacy – education – and direct community involvement

Have greater potential to lift public awareness
and increase public commitment to conservation
than any other current strategy

Nurseries or museums?

Sanctuaries' ecological legacy

Indicators of sustainability

nurseries for the widespread
restoration of NZ species on the
mainland

diverse, self-sustaining
ecosystems of NZ flora and
fauna

extensive halo - both avian and
social

a predator-free New Zealand

secure fence - regularly
checked

effective predator control

species distributed across
multiple sites

Indicators of failure

museums on life-support for the
last survivors

failed translocations - genetic
bottlenecks

ecological change enclosed within
the fence

natural disasters - disease

leaky fence perimeter

ongoing pest re-invasions

small localised populations -
vulnerable to accident

Social, economic and government foundations for a sustainable ecology

Ecological requirements	Social system support	Economic viability	Public agency support
Good planning of translocations	Support from iwi Governance		Department of Conservation
Site selection	Neighbour support		Local and central government
Protect the fence	Neighbours Volunteer time	Costs of maintenance	
Ongoing control & monitoring for pests	Volunteer time	Costs of maintenance	
Disease and Genetic diversity	Share species with other sanctuaries		DoC, Universities Research institutes

Sustaining community support



Sanctuaries' contribution is predominantly social

Topics	Ecology	Social	Economic
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Wordcount of extracts on vision and sanctuaries' future role

Contribution is predominantly social

Personally I don't measure success on visitor numbers. ... I will know in 100 years time, if it's successful, if Wellington still values it and ... contribute to it, because then it has succeeded in its education role and it has helped to change public opinions about these things.

The thing about these community ones is that they are as much social enterprises as biological enterprises ... The thing with biodiversity is that there's massive underfunding. Politicians don't understand what it takes to run the whole thing. They value it very lowly. Underpinning [everything] is the value that society puts on conservation: pretty minor, lots of lip service paid to it.

Education

I have watched tours go up there with families, and the children see a tuatara and they get absolutely exhilarated by this fact and their facial reactions are huge.

Never lose sight of the benefit of youth and children. They, in many ways, inspire their parents or caregivers and get [them] involved. They can do it better than we can.

That's why we are running the education centre, so we can involve the community, bring the next generation up to be part of it ... That's all part of integrating us with the community and making sure that in 20 years' time somebody else is there to do what I am doing.

Nurseries or museums? Sanctuaries' social legacy

Indicators of sustainability

effective advocates for
conservation

lifting social priority for
conservation and restoration

role models for other restoration
ventures

growing community use and
support

active education programme -
reaching next generations

national network of community-
based restoration initiatives

Indicators of failure

other imperatives (economic)
overshadow advocacy mission

social priority for conservation
remains low

diffusion of the model is limited -
shakeout of failed sanctuaries

community support wanes -
vandalism

isolated local ventures - limited
cooperation

The foundations of sustainability
... are predominantly social

	word counts	percent of total
Ecology	4413	5.0
Governance	8911	10.1
Management	6193	7.0
Community support	25548	28.9
<i>Sub-total social factors</i>	<i>40652</i>	<i>45.9</i>
Economic	26357	29.8
Government	17054	19.3
Total all factors	88476	

Building the sanctuary family
... skip a bunch of good stuff here



Community support is fundamental –
Neither business nor government control can deliver the vision

You really have two choices with a project like ours. You can make the decision that once you start to get large numbers of visitors going through and we are financially on our feet, that the community is nice-to-have ... but not a must-have. Or you can make the decision that without the community you lose an integral part of the reason for being.

The worst thing that could happen with a community project is for the local government ... to take it over. It would lose that amateur enthusiasm that ‘we own this project’.

Governance

... skip a bunch of good stuff here



Nurseries or museums?

Sustained community support

Indicators of sustainability

widening scope of community is
committed to the sanctuary

broad networks to community give
access to community resources -
social capital

relationships of mutual benefit
between sanctuary and community

growing pool of committed volunteers,
trustees

voluntary contributions respected,
celebrated

long term partnerships - recognizing
kaitiakitanga - kawanatanga

distributed - shared - evolving leaders
and leadership styles

Indicators of failure

few elements of community engaged

limited access to community's social
capital

weakened incentives to sustain
community support

dysfunctional relationships -
unresolved conflicts - burnout

volunteer effort not appreciated -
abused

limited mutual understanding and
respect - disengagement - distrust

concentrated leadership - slow to
change

A sustainable economic enterprise



Second most-frequently-cited
foundation for sustainability

	word counts	percent of total
Ecology	4413	5.0
Governance	8911	10.1
Management	6193	7.0
Community support	25548	28.9
<i>Sub-total social factors</i>	40652	45.9
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The market for visitors
... skip a bunch of good stuff here



Doubts about economic viability

... in the short term

People have put huge ... inspiration, [and] generosity of people's time ... to do these amazing projects and get them up and underway. And it distresses me that a lot of people just don't know where the next dollar's coming from, you know? They don't. They just don't know.

... and the long

We're trying to find alternative ways of staying financially viable. The one most at risk there is Karori, I think. You know, they're the precursor of it all. We can all thank them for making the mistakes for us. And they haven't made very many, other than, I believe, their financial model.

Nurseries or museums? Markets

Indicators of sustainability

market adequate to support current
and growing number of
sanctuaries

strong local market - few local
competitors

differentiated complementary
products

positive sum competition - attracting
new entrants

advantage to location close to larger
cities

Indicators of failure

limited market - inadequate for
current sanctuaries - shakeouts -
exits - closures

limited local market - close local
competitors

undifferentiated product offerings -
pressure on prices

negative sum competition - limited
market size

disadvantage for smaller centres - off
tourist routes

Preserving autonomy – from government

We don't want to be seen to be beneficiaries of the state and exist like that all the time, because it won't work. [What won't work?]

If you are going to get a long-term relationship with a council, which I think every one of these projects has, that is going to necessitate some compromises with what you are going to achieve so that you can fit within the council's internal visioning or whatever. [What compromises?]

Preserving autonomy – from government

ARC-run Tawharanui is funded by rates

We have no requirement to make money. We're not reliant on people through the door or anything like that

What compromises?

Tawharanui is also required to be a recreational reserve for day trips from Auckland – gates are open for car access

And – to help pay for it – there is a farm

This is not NZ before the humans came

Preserving autonomy – from the market

We need more features out there. We actually need another big feature. I have had this thing for a sky walkway. [*Treetops?*] Treetops, yeah ... We need people to be able to go out there for other than just ... we need an extra thing.

Then there's the whole adventure tourism market as well. So can you have a combination of a natural, cultural experience plus some sporting challenge or something ... that I guess appeals to the more active part of the community?

You have actually got to have something there apart from the bush. You could have something like mini-golf.

Preserving autonomy – from the market

We don't want a bar of that [commercialism]. It might draw people but it's not people we are out to draw, it's birds.

That ... workshop was all pushing branding, branding: 'You need to be better than the other guy because in the end you are just in business.' Aaaah! They are telling us to cooperate and work together but all this branding stuff is pushing us the other way. 'What have you got that the other guy hasn't? What is your competitive advantage? Know their weaknesses and exploit them!'

Preserving autonomy – from the market

What Diane thought (from her notes) -

A sanctuary should be a natural experience. “Nature on its own terms”.

I reject a theme park approach. Instant gratification is not what the sanctuary is about. If you don’t see a rare species, tough! Anyway, intermittent reinforcement (the chance of seeing something) might keep people coming back?

I reject a shop. Can’t we have one place on the planet where people can go *without* shopping?! It’s the consumer mentality that got us into this fix in the first place!

In this place the needs of the nonhuman species will come first.

Resolving the tension – to a degree
visitors provide money
... but also fulfill the mission of advocacy

[*Financial sustainability through visitation?*] Obviously that is only our very medium-term strategy. Why we are doing that is our long-term goal to achieve the conservation outcome ...

But the other thing is, [this is] also not only [about] the financial sustainability but is actually engaging the community and ... our advocacy role in the conservation world.

Preserving autonomy
will require multiple sources of income

[Sources] have to be multiple, a chunk from this source, that source etc. [It] can't depend on any one.

As well as memberships and visitor incomes ...

Corporates ... want to be associated with winners in terms of the projects, so they're sort of the last cab off the rank, really. ... I don't think, ... that corporates will be a major funder until they see something in it for them.

[One funder said that] ... that an organisation such as his would feel more comfortable by contributing to an endowment fund rather than a one-off cost each year [with] uncertainty around what future funding requests would be.

Preserving autonomy
will require multiple sources of income

Local funders – oh to be in Taranaki!

Another reason we are quite lucky in Taranaki is that we have ... got a few of these places that have actually got an asset that is producing money, and that money is handed out in the area every year. ... I think they just about have a struggle sometimes to make sure they place it where it's going to be used wisely and where it's going to benefit the region.

Local government

Environment Waikato (the regional council) rates every household \$8 for a “natural heritage rate” that raises several million dollars a year. They are a major supporter of Maungatautari.

Nurseries or museums?

Sustainable incomes

Indicators of sustainability

current challenge to economic viability
overcome

financially stable

adequate revenue to cover costs -
fulfill vision

a range of products tailored to needs
of distinct segments

for larger sanctuaries a visitor centre

multiple sources of income -
memberships - corporate - (local)
government - local funders - visitors -
endowments

Indicators of failure

inadequate revenues to cover costs -
protect fence - control predators

inadequate revenue to preserve
autonomy

economic imperative overpowers
ecological and social objectives

expand product offerings beyond
advocacy for conservation - a theme
park

limited number of sources of income
available - used

How many sanctuaries can survive?

So nationally though, if you are looking decades out ... I still think there is only room for about a dozen of these things in the country ... one in every reasonable-sized town.

There's lots of opportunity for really small ones ... a couple of hundred square metres, for a shearwater colony. [*Single species?*] Absolutely. Focused. Fantastic. Easy to do, easy to manage.

A sustainable relationship with government



Third most-frequently-cited
foundation for sustainability

	word counts	percent of total
Ecology	4413	5.0
Governance	8911	10.1
Management	6193	7.0
Community support	25548	28.9
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Relationships with DOC

... skip a bunch of good stuff here

I am a great fan of DOC, and I always speak out for them. ... You see the private trusts, they get the glamour: Maungatautari, Bushy Park, Karori, while the DOC workers are out in the bush in all weathers, and all they get is abuse.

Do sanctuaries add \$\$ for conservation
... or compete it away?

I keep saying to DOC, 'Wake up to the fact that community groups are a strong conservation force and get in there and aid and abet them ... Shorten up your staff a bit and put some money into the community groups, you get \$2 for every dollar that you invest.'

Ministers have told me that at the Cabinet table, when you are lobbying for more money for DOC to protect national parks or whatever else, other ministers are getting money for community-driven [projects] ... and they are known to go to Karori or Maungatautari. [They] say 'well you got your fair cut' ... So it actually has had the effect in my personal view in recent years of virtually having nil additional funding for the needs of the department, not even covering wages and inflation for example.

Can communities sustain
the production of a public good?

A sanctuary's conservation and advocacy activities produce benefits for society that cannot be fully priced, nor their costs fully recouped. They are to an important degree public goods.

In my opinion they are doing the work of some government agency ... Basically a bunch of local volunteers are doing what should be carried by a government agency. They are doing a great job but they can only do that for so long.

Can communities sustain
the production of a public good?

Public goods require government's power to tax and a political mechanism to assess relative value.

If you accept there's a public good, either rates or taxes is just another line on your rate demand, and there's already an organisation set up for it ... So why not rate for it and get rid of me and everybody sort of around here that's basically focused on trying to fundraise for it?

Can governments sustain the commitment to conservation
that sanctuaries are advocating for?

The other [issue] is ... [priorities for] biodiversity in government ... and social acceptance. We are partway down the track, most people generally give a nod. ... So the next step is to translate that into government policy where it gets paid for.

I have worked out the entire money for all biodiversity management in NZ from all sources is probably a maximum of \$300 million, which is 0.028% of GNP ... Society doesn't value conservation much at all.

Can governments sustain the commitment to conservation that sanctuaries are advocating for?

The very fact that five of these sanctuaries have been established by community enterprise and not by governments suggests that governments would give them a lower priority than communities have given them.

Indeed, that is a key rationale for a sanctuary's foundation: to advocate for, and to lift public support for the conservation cause.

Failure to achieve economic viability as an independent venture thus also leads to failure of a sanctuary's core social mission of advocacy as the priority given to conservation reverts to the *status quo ante* that is the only level that governments can justify.

A case for partnership

All parties will achieve more from these ventures to the extent that all contribute: the **volunteers** from the local community that give of their time for free, the **local and international visitors** that contribute to a sanctuary's economic sustainability, and the **governments** whose responsibility it is to support the public good elements of a sanctuary's activities.

For any project if you are looking at long-term financial viability – which is 50 years not five years – you are looking at establishing relationships with at least one and probably more than one long-term funder. One of them is almost certainly going to be council.

Nurseries or museums?

Relationships with government

Indicators of sustainability

public good argument accepted
government is one of principal ongoing funders

mutual advantage - sanctuary
contributions to community
recognised and valued - councils give broad support

Autonomy of community-led projects sustained

collaborative partnerships
DoC/sanctuary

Indicators of failure

government support limited to capital grants - not ongoing funding

councils see little benefit from sanctuary - offer little ongoing support

(local) government most likely back up strategy – the mother ship

community (volunteer) support weakens further

sanctuaries seen as competitive - little collaboration

Keeping it all in balance



Nurseries or museums?

Indicators of sustainability

revenues adequate to cover costs
– **and**

strong community (volunteer)
support
– **and**

autonomous partnerships with
government

Indicators of failure

inadequate revenues force change
towards commercial (a zoo)
or government control

community support wanes -
vandalism

failure to sustain production of a
public good - loss of autonomy to
government

Last words
... from a contributor

It is a huge experiment, because none of us know if this is going to be successful. It looks like it is going to be successful, but we still haven't got the last mouse or rodent off the place. And even if we don't, does that matter? How can we sustain that over time? ... All of that is for the future; it is experimental. We are learning as we go.

Last words
... from me



Last words

... from me

Consider the fence that surrounds each of these sanctuaries. Its overt function is to protect the endangered ecologies within from the predations of non-native species. But there is more to it than that. The fence is also a powerful symbol of the absolute vulnerability of New Zealand's indigenous species and of their absolute reliance on human intervention to arrest their decline. Protecting the fence is going to require regular inspection of every metre for as long as it is there, and periodic replacements for centuries to come. The fence is a large-scale physical reminder to the world outside – to us – of the endless vigilance required to protect our country's decaying biodiversity. These fenced mainland sanctuaries are microcosms of the global effort to protect and enhance biodiversity. More than any other conservation strategy, sanctuary fences throw the responsibility for what happens on us.

