

Power to the People

Marine Citizen Science and DOC

Don Neale

**Dept of Conservation, Hokitika
for the EMR Wananga 2017**

Photo: V Zintzen, DOC





What is Citizen Science?

It's anything that links ...

Citizens & Science

- Communities
- Whanau
- Adults
- Kids
- Clubs
- Schools
- Cultural groups

- Professional -
- Universities -
- Tohunga -
- Amateur -
- Retired -
- Kaimahi -
- After hours -
- Techo geeks -

Where do DOC & other Govt agencies fit in?

Citizen Science can be good for Conservation

To **engage people** in science & conservation

To **generate** useful **data** - 'crowdsourced' or focused

To **solve** community **problems** through science

Marine Citizen Science adds to DOC's '2025 Stretch Goals' to:

- Establish a representative **network of MPAs**
- Restore **50 freshwater** (& estuarine!) **catchments**
- Advance partnerships with **whanau, hapu & iwi**
- Increase **public involvement** in conservation



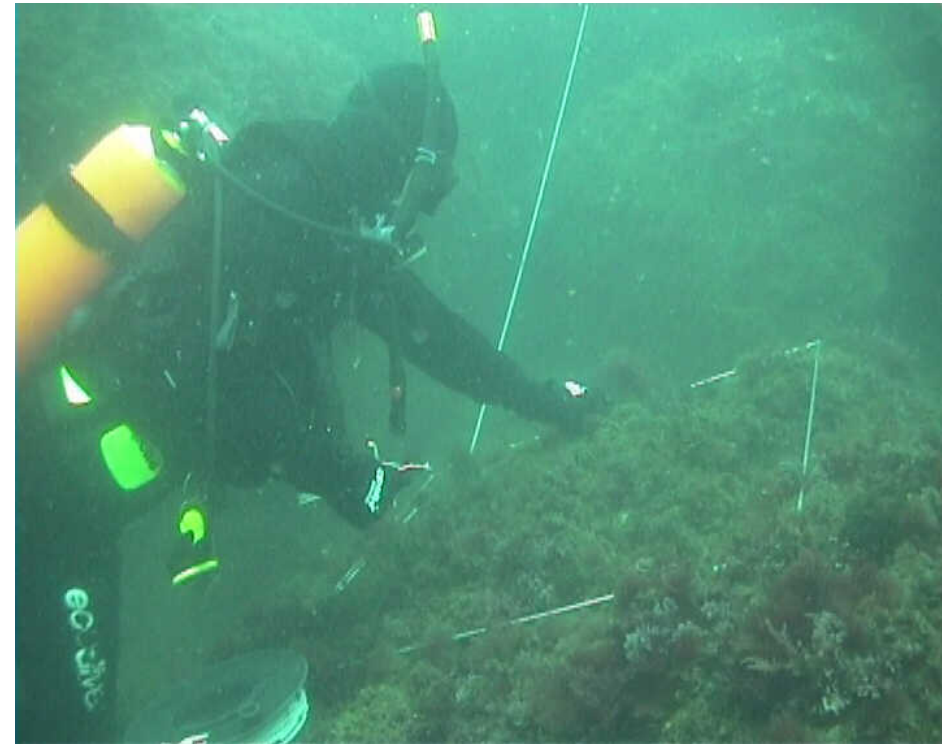
What's DOC's role in Citizen Science?

- Provide funding (is it then Cit Sci, or just a contract?)?
- Lead and coordinate – strategy, networks?
- Provide ideas for projects – with conservation benefits/relevance?
- Develop new projects?
- Use Cit Sci to 'do DOC's work'- monitoring, education, advocacy, surveillance?
- Test new technology?
- Contribute scientists/experts (for survey design advice, species identification, data analysis etc)?
- Facilitate relationships, incl links between scientists, communities, whanau, hapu & iwi?
- Produce 'toolboxes' of methods?
- Develop public 'infrastructure' for Cit Sci – Cit Sci 'hub'/platforms, databases, data storage & management, networks, toolboxes of methods, publications & media?
- Provide advice & encouragement, and authorize where needed (eg work in marine reserves or with Wildlife)?



Directions & Opportunities?

- Provide a Marine Citizen Science hub
- Promote & use existing platforms & projects
- Start new projects
- Marine Monitoring Toolbox
- Maturanga Maori
- Health & Safety
- Use new technology
 - social media
 - web-based apps
 - electronic toys(drones, ROVs, cameras, GoPros...)



Crowdsourcing your ideas!

How do YOU think DOC
can best contribute to
Marine Citizen Science?



Possible topics for the April 2017 EMR Marine Citizen Science Wananga – “DOC’s role in Citizen Science”

- Why is Cit Sci important to DOC?
 - Stretch goals & Outcomes
 - Expand conservation interest & activity
- The role of government agencies (DOC) in NZ’s Citizen Science – how does this differ from the roles of other groups?
 - Provide funding (is it then Cit Sci, or just a contract?)
 - Lead and coordinate – strategy, networks
 - Provide ideas for projects – with conservation benefits/relevance
 - Develop new projects
 - Use Cit Sci to ‘do DOC’s work’ - monitoring, education, advocacy, surveillance
 - Test new technology
 - Contribute scientists/experts (for survey design advice, species identification, data analysis etc)
 - Facilitate relationships, and links between scientists, communities, w/h/i
 - Produce toolboxes of methods
 - Develop public ‘infrastructure’ for Cit Sci – Cit Sci ‘hub’/platforms, databases, data storage & management, networks, toolboxes of methods, publications & media
 - Provide advice & encouragement, and authorize where needed (eg work in marine reserves or with Wildlife)
- Health & Safety considerations in Cit Sci.
 - What are the rules?
 - How can H&S be managed?
 - WUC diving trial
- Other risks
 - Sustainability (long term or defined period)
 - Quality & scientific robustness
 - Relevance