# **Final Report**

## WikiProject Te Papa Research Expeditions

by <u>Siobhan Leachman</u> 0000-0002-5398-7721 and <u>Lucy Schrader</u> 0009-0004-1819-5659

<u>CC BY 4.0</u> DOI: <u>10.5281/zenodo.12639654</u>

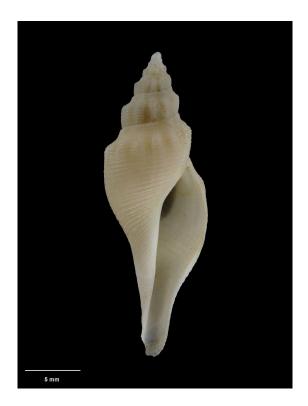


Image credit: <u>Exilia expeditionis (Dell. 1956)</u>, collected 10 February 1954, Chatham Rise, New Zealand. Museum of New Zealand Te Papa Tongarewa (M.009260) Originally named in honour of the Chatham Island Research Expedition 1954 as *Chathamidia expeditionis*, <u>CC BY 4.0</u>, via Wikimedia Commons

## Background

Expeditions and other collecting events are a major source of objects in museums, both in New Zealand and around the world. Historically, these journeys were often transdisciplinary: biological and Earth science specimens were collected at the same time as ethnological or anthropological objects. As a result, specimens and other material gathered during the same expedition, as well as the related data and metadata, are often distributed across multiple institutions, not just within New Zealand, but also internationally.<sup>1</sup>

Many historical research expeditions were driven by colonial agendas, aiming to discover new resources to exploit, and their findings were seldom shared with the local <u>iwi</u>. Understanding research expeditions helps bring to light or highlight the colonial origins of museum collections. This understanding can also contribute to recognizing and addressing the impacts of research expeditions.<sup>2</sup>

There is also a need to link historical and contemporary research expeditions to other entities. To do so requires the unambiguous labelling of, and obtaining persistent identifiers for, such expeditions. Creating and enriching Wikidata items for research expeditions facilitates the sharing of metadata in a wide range of languages, assists in providing access to scattered information about the event including the institutions housing expedition specimens and objects, the participants, the locations visited and the publications, archives, images and artworks generated by such expeditions. Creating and enhancing Wikidata items for research expeditions also assists with the linking of distributed material and related research data both within New Zealand and worldwide.

Several studies have shown the importance of people identifiers for linking collection data.<sup>3</sup> The same is true for research expeditions.

<sup>&</sup>lt;sup>1</sup> von Mering S, Braun PJ-C, Cubey RWN, Groom Q, Haston EM, Hendriksen A, Johaadien R, Leachman S, Marsden L, Rainer H, Santos J, Endresen D (2023) Modelling Research Expeditions in Wikidata: Best Practice for Standardisation and Contextualisation. Biodiversity Information Science and Standards 7: e111427. <u>https://doi.org/10.3897/biss.7.111427</u>

<sup>&</sup>lt;sup>2</sup> Das, S. & Lowe, M. (2018). Nature Read in Black and White: decolonial approaches to interpreting natural history collections. Journal of Natural Science Collections, Volume 6, 4 - 14. http://www.natsca.org/article/2509

<sup>&</sup>lt;sup>3</sup> Groom Q, Bräuchler C, Cubey RWN, Dillen M, Huybrechts P, Kearney N, Klazenga N, Leachman S, Paul DL, Rogers H, Santos J, Shorthouse DP, Vaughan A, von Mering S, Haston EM (2022) The disambiguation of people names in biological collections. Biodiversity Data Journal 10: e86089. https://doi.org/10.3897/BDJ.10.e86089

Once Wikidata identifiers for these expeditions, their participants and other related entities exist, they can be added to the records of the corresponding entities in any institution's collection management system. Institutions will then have the ability to link from their own collection metadata to items in Wikidata, empowering linking to collections held in other institutions. The participants of the research expedition can be further linked to specimens gathered during the expedition with the use of tools such as <u>Bionomia</u>.

## How the Te Papa project was initiated

This project was initiated as a result of the work Siobhan Leachman (Wikimedia User:Ambrosia10) continues to undertake with the <u>Biodiversity Information</u> <u>Standards Association (TDWG) Modelling Research Expeditions task group</u> as well as with <u>Wikidata WikiProject Research Expeditions</u>. She has been collaborating with natural history institution staff and Wikimedians from multiple countries, helping to develop an agreed Wikidata schema for research expeditions. The intention is to encourage museums and natural history institutions to add research expedition data into Wikidata to create a comprehensive dataset of research expeditions undertaken.

The TDWG Modelling Research Expeditions task group also aims to produce <u>Biodiversity Information Standards Association</u> (TDWG) approved best practice documentation, advising natural history institutions on how to share their data on research expeditions with Wikidata. This will ensure that research expedition data will be accessible and reusable by anyone for any purpose.

Wikidata WikiProject Te Papa Research Expeditions was conceived as a way to test the draft Wikidata schema for research expeditions and to trial working within an institution to extract research expedition data and share the same via Wikidata. The recommendations resulting from the Te Papa research expeditions pilot project are intended to feed into the TDWG guidelines. The project also aimed to raise the awareness of Te Papa staff of the Te Papa WikiProject as well as the international research expedition projects and to organise outreach events for both staff and the wider public.

## Funding

The organiser of the project, Siobhan Leachman submitted this <u>funding application</u> to <u>Wikimedia Aotearoa New Zealand</u> (WANZ). She also met with Te Papa's Kaitūhono Hora Raraunga | Digital Channels Outreach Manager <u>Lucy Schrader</u>, discussing the project and its aims, and seeking institutional support from Te Papa for the pilot project. Siobhan Leachman was successful in obtaining financial support for this project from WANZ as well as institutional and staff time in kind support from Te Papa.

## Aims of project

The original aims of this project included the following:

- Create a Project sub page as part of Wikidata WikiProject Research Expeditions
- Liaise with Te Papa staff to obtain information and data on research expeditions
- Create and enrich Wikidata items on research expeditions affiliated with Te Papa, its staff and collections
- Ensure these research expedition items are appropriately interlinked with existing or newly created Wikidata items on such things as locations, people, vessels etc in line with the proposed schema.
- Undertake discussions with Te Papa staff, participants in the Wikidata Research expeditions project and the TDWG research expeditions working group to resolve any issues raised during the project
- Investigate with Te Papa staff the potential for reusing Wikidata items for research expeditions in Te Papa's collection management system.
- Ensure discussions on the schema and any decisions or agreements reached are documented. The current document being used by Siobhan Leachman, Wikidata Wikiproject Research Expeditions and the TDWG task group to track these discussions can be seen <u>here</u>.
- Meet with the internal Te Papa Wiki group to explain about the project, the schema and the proposed best practice documentation.

- Write a report giving a summary of the project, the efforts undertaken to conceptualise the project, how to obtain funding as well as institutional support for the project, information on the practical issues addressed during the project and how these were resolved, and provide information on the outreach efforts undertaken during the project.
- Hold a public facing Wiki editing event to improve research expedition information in English Wikipedia, Wiki Commons and Wikidata.

## Work undertaken

The following is a summary of the work undertaken during the project. The project was run for 12 weeks beginning the 4th of March 2024 and ending on the 26th of May. Outreach events were organised and supported after the official cessation date of the project.

	Wikidata:WikiProject T	Papa Research Expedit	tions							
	Home	Plan of work	Properties	Resources	Events	Outcomes				
			WikiProject Te Pap	a Research Expeditions						
	About WikiProject T	e Pana Research Evne	ditions							
•	About WikiProject Te Papa Research Expeditions [eff] UserAmbrosia10 has obtained funding support from Wikimedia Actearoa New Zealand & to undertake a residency at the Museum of New Zealand									
	Te Papa Tongarewa to support the running of a 12 week WikiProject on Te Papa research expeditions.									
	The aim of this project is to trial the current research expeditions schema <sup>2</sup> / <sub>2</sub> proposed by the Wikidata WikiProject Research Expeditions <sup>2</sup> / <sub>2</sub> by creating or enriching Wikidata with data on research expeditions undertaken by Te Papa/ Dominion Museum/Colonial Museum and institutional staff while employed at the museum.									
	The intention is to ensure thes	a research expedition items are,	where possible, richly interlinked wi	th data such as the participant	s, the location					
	information, and institutions the	at house objects collected during	the expedition and publications, are	chives and artworks generated	during or as a result					
	of the expedition. Any issues r	aised during this project will be di	scussed with both interested staff a	t Te Papa as well as WikiProje	ct Research					
	Expedition participants and the	wider Wikidata and Biodiversity	community. These discussions will	aim to improve the schema as	well as elicit	1 Acres				
	recommendations for best practice when implementing the schema. The plan is to resolve as many issues as possible prior to the WikiProject and the Auckland Islands Research Expedition									
		working aroup publishing recomm	nendations and/or a Biodiversity Info	ormation Standards TDWG dat						
		king similar Wiki work. See the d	liscussion page 🖉 of the WikiProject	Research Expeditions for exa						
	are currently under debate. Th	king similar Wiki work. See the d e outcomes of Te Papa WikiProje	ect Research Expeditions will in this	Research Expeditions for exa		anticipated				
	are currently under debate. Th	king similar Wiki work. See the d	ect Research Expeditions will in this	Research Expeditions for exa		anticipated				
	are currently under debate. Th to be generated by the TDWG	iking similar Wiki work. See the d e outcomes of Te Papa WikiProje Research Expeditions Working O	ect Research Expeditions will in this	Research Expeditions for exa way assist with the generation	of best practice documentation a					
	are currently under debate. Th to be generated by the TDWG Information on the practical iss will be created at the end of th	king similar Wiki work. See the d e outcomes of Te Papa WikiProje Research Expeditions Working ( ues raised when undertaking and is project to ensure this implement	ect Research Expeditions will in this Group. d implementing the WikiProject Te F ntation information is fed back to bo	Research Expeditions for exa way assist with the generation tapa Research Expeditions will th the WikiProject Research Expeditions	of best practice documentation a also be obtained. It is intended th conditions community and to the T	hat a report				
	are currently under debate. Th to be generated by the TDWG Information on the practical iss will be created at the end of th working group to assist other i	king similar Wiki work. See the d e outcomes of Te Papa WikiProje Research Expeditions Working ( ues raised when undertaking an is project to ensure this implemen stitutions who may be interested	ect Research Expeditions will in this Group. d implementing the WikiProject Te F ntation information is fed back to bo d in undertaking similar projects. Thi	I Research Expeditions for exa way assist with the generation Papa Research Expeditions will th the WikiProject Research Ex s report will be shared with not	of best practice documentation a also be obtained. It is intended th equitions community and to the T just be the Wikimedia community	hat a report TDWG y and Te				
	are currently under debate. Th to be generated by the TDWG Information on the practical iss will be created at the end of th working group to assist other i	king similar Wiki work. See the d e outcomes of Te Papa WikiProje Research Expeditions Working ( ues raised when undertaking an is project to ensure this implemen stitutions who may be interested	ect Research Expeditions will in this Group. d implementing the WikiProject Te F ntation information is fed back to bo	I Research Expeditions for exa way assist with the generation Papa Research Expeditions will th the WikiProject Research Ex s report will be shared with not	of best practice documentation a also be obtained. It is intended th equitions community and to the T just be the Wikimedia community	hat a report TDWG y and Te				

 A project page was created for <u>Wikidata WikiProject Te Papa Research</u> <u>Expeditions</u>. A <u>Wikidata item</u> was also created for the WikiProject enabling <u>on</u> <u>focus list of Wikimedia project (P5008)</u> statements to be added to appropriate research expedition items. Adding such statements empowered queries of Wikidata to track the progress of the project.

- Meetings were held prior to the project with Lucy Schrader as well as with Te
  Papa library and archives staff. The aim of these meetings was to gauge the
  potential in kind support that could be provided by Te Papa and staff as well
  as to raise the awareness of the project with staff most likely to be able to
  provide research expedition information.
- Regular weekly meetings were held during the project with Lucy Schrader to discuss the project, any issues that had arisen, and how the project data might be round tripped and reused in Te Papa's collection management system. Emails were also exchanged to obtain advice or to address issues that arose. Lucy Schrader was a vital contributor to the project. She helped scope the project from Te Papa's perspective, provided guidance to Siobhan Leachman, facilitated meetings with Te Papa staff, shared her knowledge of Te Papa's collection management system, provided leadership in organising the three outreach events undertaken at Te Papa and made vital contributions to the outcomes of the project. Her creation of the <u>Wikipedia infobox template for expeditions generated from Wikidata</u> was an important output of the project.
- Multiple meetings, both formal and informal, were held with various Te Papa staff, with the aim of raising awareness of the project and to elicit information on research expeditions staff had participated in or to obtain information on research expeditions that were important to Te Papa collections. This included a meeting where Siobhan Leachman presented on the Te Papa Research Expeditions project to the Te Papa natural history team. <u>Slides for</u> <u>that meeting can be found here.</u>

Meetings were also held relating to the reuse of appropriate Wikidata QIDs in Te Papa's collection management system as well as the potential use of those QIDs to link specimens to the research expedition during which they were collected.

 The successful trialling of the research expedition Wikidata item schema. Numerous Wikidata items were created for research expeditions as well as for the people participating, the publications generated, the locations visited, and the vessels used during those expeditions. As an example <u>see this Wikidata</u> <u>query for a list of Wikidata items created for Te Papa associated research</u> <u>expeditions</u>. Prior to the beginning of this project (as at 29 February 2024) there was only 1 Wikidata item in existence for a research expedition which fell within the focus of the Te Papa research expeditions WikiProject. By the end of the project (as at 26 May 2024) there were 119 research expedition items.  The Wikidata items created for research expeditions during this project were linked with existing or newly created Wikidata items for participants, affiliated organisations, locations, ships and publications. <u>See this Scholia profile giving</u> <u>an indication of this linking for the Chatham Islands expedition 1954.</u> A visualisation of this can be seen below.

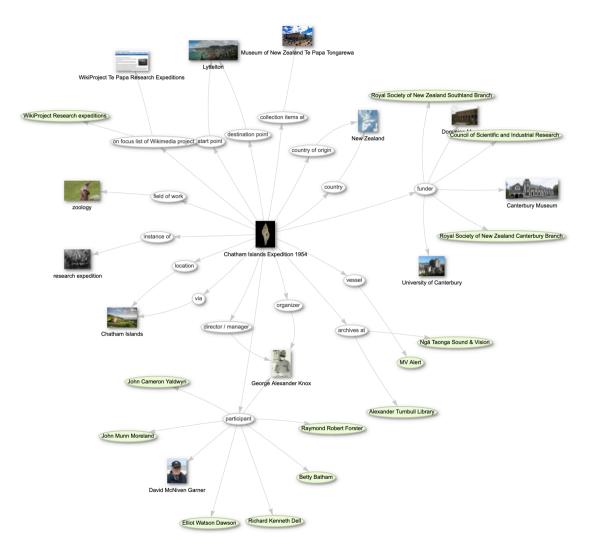


Image credit: <u>Screenshot</u> of the <u>Scholia profile</u> for the Chatham Island Expedition 1954 <u>CC BY SA 4.0</u> via Wikicommons

The linking of a Wikidata item for a type specimen collected during a research expedition to the appropriate research expedition item, was also discussed. It was recommended that the <u>significant event (P793</u>) be used and that ideally this statement should be placed on the type specimen Wikidata item. However, often type specimens do not yet have a Wikidata item created for them. Therefore it was also recommended that a statement using the significant event property to connect to the research expedition item be used on the appropriate taxon item.

These recommendations have been raised with the TDWG research expedition task group and, should that group agree, will be included in the TDWG research expeditions best practice documentation.

- Research expedition related images were also uploaded into Wikicommons. Wikicommons categories were created for existing and newly added images of specimens or other images and then these categories were then linked back to appropriate Wikidata items. As an example of such a Wikicommons category see the <u>Titī / Muttonbird Islands Expedition 1955</u>.
- Discussions were held with Lucy Schrader as well as with Wikicommons editors regarding the appropriate statements to be added to the Structured Data on Commons (SDC) of specimen images. Similar to the addition of significant event statements on type specimen and taxon items in Wikidata, Siobhan Leachman advocated for the <u>significant event (P793)</u> property to be used to create a SDC statement on specimen images, linking specimen images to the applicable research expedition.
- Multiple Wikipedia articles were created for expeditions, participants, vessels and species associated with Te Papa related research expeditions. This work was undertaken in anticipation of the three planned Wiki events, empowering participating editors to work on research expedition content. <u>The preparation</u> <u>document listing many of these newly created articles can be found here.</u>
- Issues raised during the project were documented in a <u>Google document</u> shared with Lucy Schrader. This document was used to ensure relevant discussion points were noted and also that potential solutions to these issues were recorded. Discussions, ideas and solutions documented in this shared resource were then collated and, where appropriate, were included into the <u>documentation</u> being prepared to guide the drafting of the TDWG working group's best practice guidelines.
- Siobhan Leachman attended regular meetings with other Wiki editors involved with the <u>WikiProject research expeditions</u> as well as participants of the <u>TDWG</u> <u>task group</u>. She updated the attendees of these meetings on progress of the Te Papa research expeditions project and initiating discussions on issues raised during the project.

- Siobhan Leachman kept the Wiki community updated on the progress of the project through the GLAMWiki newsletter. Links to these updates can be found below.
  - https://outreach.wikimedia.org/wiki/GLAM/Newsletter/February\_2024
  - https://outreach.wikimedia.org/wiki/GLAM/Newsletter/March\_2024
  - <u>https://outreach.wikimedia.org/wiki/GLAM/Newsletter/April\_2024</u>
  - o <u>https://outreach.wikimedia.org/wiki/GLAM/Newsletter/May\_2024</u>
  - https://outreach.wikimedia.org/wiki/GLAM/Newsletter/June\_2024
- She and Lucy Schrader submitted an abstract to both <u>Wikimania 2024</u> and to the upcoming joint <u>SPNHC/TDWG 2024 conference</u> aiming to present on the Te Papa research expeditions project. Unfortunately the abstract to Wikimania 2024 was rejected. However the SPNHC/TDWG 2024 conference abstract was accepted and Siobhan Leachman's funding application to Wikimedia Aotearoa New Zealand to attend this conference was successful. Siobhan Leachman and Lucy Schrader hope this presentation will raise awareness in the wider Wikimedia and the natural history communities of this work and will provide encouragement and give guidance to those editors, institutions and staff who wish to replicate this project.
- Three separate outreach events were planned relating to this project. The first was a #1Lib1Ref event held for Te Papa staff on the 29th of May 2024. As part of this event participants were encouraged to add citations to relevant Wikipedia articles related to research expeditions. The second was a Te Papa staff editathon encouraging staff to enrich Wikipedia articles on research expeditions. This was held on the 4th of June 2024. The third and last event was held on the 13th of July and was a public facing editathon event encouraging participants to enrich Wikipedia articles related to Te Papa associated research expeditions.

## Challenges raised during the project

#### Scoping of the project

One of the main issues raised when commencing this project was to define what is a research expedition. There was a lack of an agreed definition and as a result this issue required careful consideration. A proposed list of considerations was created and fed back to the international collaboration that is the WikiProject Research Expeditions to discuss, with the aim of reaching agreement and then feeding this definition into the best practice documentation being prepared by the TDWG task group.

Examples of questions that can guide an editor deciding whether a particular trip or journey is a research expedition include the following:

- Has the event been specifically referred to as a research expedition?
- Is there a specified research aim for the journey?
- Are participants travelling to a destination?
- Do collected specimens or objects use an assigned series of collection numbers?
- Do specimen or object labels specify an expedition?
- Did the event require discrete organisation, funding or sponsorship?
- Are there organisations affiliated to the event?
- Are there definable start and end dates?
- Were collecting permits or similar documentation required and/or obtained?
- Did the event result in an expedition report or publication?

The issue of whether a journey falls within the definition of a research expedition also raised questions about what to do with collection data where the collecting trip is not regarded as a research expedition. The <u>Donald Petrie Wikidata item</u> was used as an example on how to deal with this type of data.

The solution proposed was to add <u>work location (P937)</u> statements to a collector's wikidata item where the collector collected specimens but was not on a journey that fell within the definition of a research expedition. These statements can be qualified either by start or end date statements or alternatively point in time statements depending on the sources being used to support such declarations.

Another issue at the commencement of this project was deciding which research expeditions could be classified as falling within the scope of the WikiProject Te Papa research expeditions. It was decided that the project would take a broad view of what constituted a Te Papa research expedition. It was decided the WikiProject Te Papa research expeditions would cover any expedition where Te Papa or its predecessors were involved, any expedition where staff of Te Papa or its predecessors were participants in or had published about that expedition and its collections, or any expedition where Te Papa currently holds publications or archives relating to or specimens collected during that expedition.

#### Disparate sources of information

One of the main challenges of this project was the lack of a comprehensive dataset listing all research expeditions Te Papa, its predecessors and the staff of these organisations, were affiliated with or connected to. There was no one institutional repository giving comprehensive Te Papa related research expedition data. This is by no means unusual in the natural history community and is one of the driving forces behind the creation of the TDWG research expeditions task group.

Therefore the challenge of this project was to locate the disparate and diverse sources of information on research expeditions that link to Te Papa, its predecessors, staff, collections, archives and publications. Even if research expedition data was held in Te Papa's collection management system, those data tended to be sparse and were unlikely to be linked to specimens, participants, locations, publications and other relevant content. This resulted in various other avenues having to be explored to obtain research expedition data, with some of these avenues being more unconventional than others.

For example the <u>Te Papa Collections Online platform</u> and <u>blog</u> list were searched for party records, topics and posts that covered research expeditions. This public facing platform was used, rather than Te Papa's collection management system, as it ensured the data was publicly available. By using the Te Papa Collections Online platform to access information, rather than Te Papa's EMu collection management system, this helped reduce the impact of such issues as privacy concerns, culturally sensitive data and endangered species location information.

Along with information elicited from Te Papa's Collections Online platform, Lucy Schrader undertook a keyword search on the pdf files of Te Papa and Dominion Museum Annual reports as well as articles in the Dominion Museum Records journal to surface publications that dealt with research expeditions. This was a rich source of research expedition data.

A list of research expedition reports, provided by the Te Papa library staff, was helpful in accessing publications related to particular research expeditions. Unsurprisingly research expeditions that had books written about them were more likely to already have existing Wikidata items but these resources aided the enrichment of those existing items. A spreadsheet was also provided of those holotype specimens that were linked to research expeditions in both the collection management system and visible on Te Papa collections online. Although helpful, relatively few holotypes were linked in Te Papa's collection management system to the research expedition they were collected on. However, the few that were linked indicated how effective a workflow empowering this linking would be. Should Te Papa decide to make use of the Te Papa research expedition data in Wikidata by adding this into its collection management system Te Papa could then explore further such linking.

A search of Te Papa archives was undertaken and a Google spreadsheet was provided listing research expeditions on which Te Papa holds archives. This was a valuable starting point and fed into the use of the <u>archives at P485</u> statements on Te Papa research expedition Wikidata items.

A similar search was undertaken on both the <u>Biodiversity Heritage Library</u> and the <u>Internet Archive</u> corpora. These two digital libraries were invaluable as sources of information on research expeditions related to Te Papa.

Te Papa Library and archive staff were active contributors to the project and were extremely helpful in sourcing books, publications and archival documents that dealt with Te Papa related research expeditions.

Specimens and specimen labels were also used to obtain information on research expeditions. Numerous Te Papa specimen images had already been uploaded into Wikicommons along with images of relevant specimen labels. These labels were an unanticipated source of information on research expeditions. This led to discussions about Te Papa's upload policy for Wikicommons, with Siobhan Leachman advocating for specimen labels to be uploaded where possible with the specimen images.

NATIONAL MUSEUM, WELLINGTON, N.Z.E.L. 1883 Dr. Th. Mortensen's Pacific Expedition 1914-16 Luidia neozelanica Sted: Off White Jef Moton Dybde: 55 frend. COTYPE Bundart: Sandy une Off white Id, NZ Redskab: Oredge 55 frus Sandy mad. Dredge Datum: 19. X11. 19. ×11. 1914 Luidia neo-telanica wrtsn Cotype

Image credit: Specimen labels of *Luidia neozelanica* Mortensen, 1925 (EC.001883) Museum of New Zealand Te Papa Tongarewa, <u>CC BY 4.0</u>, via <u>Wikimedia Commons</u>

The taxon name itself could also provide a clue about the specimen being linked to a research expedition. Those specimens with the epithet *expeditionis* indicated the specimen was obtained during an expedition. An example is this <u>holotype specimen</u> *Chathamidia expeditionis* Dell, 1956 (now known as *Exilia expeditionis* (Dell, 1956)), which was originally named in honour of the <u>Chatham Island Expedition 1954</u>.

#### Te Papa library catalogue

Te Papa librarians were invaluable in obtaining information and publications on Te Papa related research expeditions. However one challenge in finding and accessing publications on research expeditions was the lack of comprehensive descriptions of resources in the Te Papa library catalogue. The limitations of these descriptions resulted in difficulties in finding and accessing vital resources. An example of this was the publication *Cook Bicentenary Expedition in the South-West Pacific*. In the library catalogue this publication was described as the Royal Society of New Zealand Bulletin 8. It is therefore recommended that Te Papa support librarians to better describe library content in their catalogue. This would ensure researchers are more self-sufficient and less likely to need intensive library staff support. Indigenous knowledge and data sovereignty issues.

Many research expeditions have used, extracted, reworked, or removed from Indigenous communities Indigenous knowledge and resources. Examples of such actions include using Indigenous people as guides or collectors during an expedition, the publication of Indigenous oral traditions or the collection of cultural objects from Indigenous communities .

Although the use of Te Papa's Collections Online platform as a source of information has assisted in assessing the public usability of data, one expedition had deeply integrated Indigenous knowledge that kept Siobhan Leachman from adding it to Wikidata without more specific guidance.

This expedition resulted in <u>Elsdon Best's ethnobotanical collection held at Te Papa</u>, and is described in the publication <u>Waikare-Moana</u> by Best. The expedition was led by Tūtakangahau, a <u>Tūhoe</u> chief and the last tohunga (expert) to be schooled in that iwi's traditional whare maire (school of learning). Tūtakangahau provided Best with a great deal of mātauranga about the specimens he collected, including rongoa (medicinal knowledge). This knowledge was included on some specimen labels as well as in Best's book.

Though this knowledge has been publicly available for well over 120 years, sharing information about the expedition on Wikidata has the potential to make it more accessible and raise its profile, especially as linking specimen data and images to the expedition would surface associated knowledge. As the source and custodians of this knowledge, Tūhoe have data sovereignty rights regarding the access and use of it, particularly in light of Waitangi Tribunal decision <u>Wai 262</u>. For these reasons, this expedition has not been added to Wikidata, and guidance was sought from Te Papa's Mātauranga Māori team. The Expeditions involving Indigenous knowledge section of the Outputs and recommendations portion of this report gives a summary of the guidance given by the Mātauranga Māori team.

#### Staff engagement

One of the main challenges of this project was to engage with Te Papa staff. This was as a result of the project being undertaken by Siobhan Leachman, a Wikimedian who was external to Te Papa. It was absolutely vital to have an internal contact, in this case Lucy Schrader, helping oversee the project and who proactively assisted with creating engagement opportunities with Te Papa staff. This challenge can be mitigated if an institutional staff member rather than an external Wikimedian in residence undertakes similar projects.

#### Wikipedia editathons

Initially it was anticipated that a Wikidata editathon would be held, encouraging staff and the public to add Wikidata items on Te Papa related research expeditions. However the disparate sources of information on Te Papa research expeditions, as well as the need to undertake often quite detailed research in order to obtain relevant data to add to the Wikidata item, resulted in the decision that a Wikidata event would not be feasible.

Instead it was agreed that two English Wikipedia editathons on Te Papa research expeditions would be held, aiming to enrich the coverage of Te Papa related research expeditions in Wikipedia. The goal was to improve Wikipedia articles about Te Papa related research expeditions as well as the articles on the people, locations, vessels and taxa that were associated with research expeditions.

Prior to these events Siobhan Leachman and Lucy Schrader created multiple stub articles on research expeditions, participants, locations, vessels and taxa linked to research expeditions. These stub articles were collated in a <u>Google sheet</u>, allowing event participants to claim an article to edit and to reduce possible edit conflicts. This google sheet also empowered organisers to provide links to resources that could be used to improve articles.

#### Research Expeditions Te Papa Staff Editathon

This editathon was held on the 4 June 2024 and was attended by Te Papa staff. 8 editors attended the day-long session with two of those editors being new. The event dashboard can be found <u>here</u> where it can be seen that 22 Wikipedia articles were improved with the 8 editors adding over 7500 words. Editors also uploaded images into WikiCommons and improved data and references in Wikidata.



Image Credit: Te Papa research expeditions staff editathon by Siobhan Leachman, CCO, via Wikimedia Commons

#### Research Expeditions Public Editathon

This event was held on the 13th of July 2024 and was attended by 15 editors from the general public as well as Te Papa staff.

The dashboard for this event can be found here.



Image Credit: Te Papa research expeditions public editathon by Siobhan Leachman, CCO, via Wikimedia Commons

## Outputs and recommendations

## Research expedition Wikidata schema

The Te Papa research expeditions project confirmed that in general the <u>proposed</u> <u>Wikidata schema for research expeditions</u> worked well and was flexible enough to adapt to different types of expeditions including the disparate information available on those different expeditions.

However one significant change was made to the Wikidata schema as a result of this project. Originally Siobhan Leachman had proposed using the <u>has works in the</u> <u>collection (P6379)</u> property where the participants had produced artworks or photographs during the research expedition. This statement was intended to link the expedition item to the item for the institution holding artworks or photographs generated during the expedition. However, after trialling the use of this property, she came to the conclusion it was not appropriate for use on a research expedition item.

Instead, where photographs have been created, the more appropriate property to link the expedition to the holding institution is the <u>archives at (P485)</u> property on the

expedition item. For artworks, if the artwork has a Wikidata item, the research expedition can be linked via the use of the <u>significant event (P793)</u> property on the artwork item. Alternatively the expedition can be linked to the institution holding the artwork via the use, on the artist item, of both the <u>has works in the collection (P6379)</u> property and the <u>participant in (P1344)</u> property.

## Te Papa round tripping

A key outcome of this project Te Papa agreed to create a party record in their collection management system for each relevant research expedition surfaced during this project. This EMu party record will in turn generate a Te Papa agent identifier, visible on the Te Papa Collections Online platform, that can then be linked to in Wikidata. See for example the 1907 Sub-Antarctic expedition on the Te Papa Collections Online platform on the Te Papa Collections Online platform on the Te Papa Wikidata item for that expedition <a href="https://collections.tepapa.govt.nz/agent/38266">https://collections.tepapa.govt.nz/agent/38266</a> and the Wikidata item for that expedition <a href="https://www.wikidata.org/wiki/Q4558719">https://www.wikidata.org/wiki/Q4558719</a> with the appropriate Te Papa agent ID linked to the same.

#### Project schema mapping to EMu collection system

To support this round tripping, Lucy Schrader worked with the Te Papa Digital Collections & Access team (DCA) to trial mapping between the WikiProject research expeditions schema and the fields available in Te Papa's EMu collection management system. The provisional mapping is available on the <u>WikiProject Te</u> <u>Papa Research Expeditions Mapping to EMu page</u>, and uses EMu's Parties module.

Because of the architectural differences and available fields, expeditions can't be mapped 1:1 between these systems, but the EMu mapping includes such fields as:

- Expedition name
- Start date
- End date
- And crucially, the Wikidata item QID.

The Wikidata item can also be associated with the Te Papa record (an 'agent' when published online) using the <u>Te Papa agent ID property (P3544)</u>. This round tripping is extremely useful both within Te Papa's collection management system and in Wikidata for ensuring interconnection and supporting updates as more information is connected or enriched.

#### Te Papa actions

Along with Te Papa creating party records for each identified research expedition as well as undertaking work to enrich these records in its collection management

system, discussions were also undertaken with Lucy Schrader and Te Papa collection managers to explore the possibility of linking specimens in Te Papa's collection management system to appropriate research expeditions. These discussions are ongoing but it is likely that this enrichment of Te Papa specimen records will be another positive outcome of this project.

## Expeditions involving Indigenous knowledge

This project raised the issue of how to handle expedition data that is closely tied to Indigenous knowledge. Discussion with Te Papa's Mātauranga Māori team was needed to explore the issue and outline an approach for these situations.

As mentioned above, many research expeditions have used, extracted, reworked, and removed Indigenous knowledge, such as using local guides, the publication of indigenous oral traditions or the collection of natural or cultural objects.

In reviewing the Elsdon Best ethnobotanical expedition, Te Papa staff determined that these cases needed to be worked through with the relevant Indigenous community, following Te Papa's principle of Mana Taonga as well as the <u>CARE</u> <u>Principles for Indigenous Data Governance</u> and the <u>Māori Data Governance Model</u>.

More detail about this is given under the Data sharing considerations section in this report.

#### Wikidata Queries

Prior to the start of this project there was only one research expedition linked in Wikidata to Te Papa or its predecessors. This was via the <u>affiliation (P1416)</u> Wikidata property. The following are links to the Wikidata Query Service showing the results editing of Wikidata items during the WikiProject Te Papa research expeditions. At the cessation of this project on the 26th of May 2024 there were:

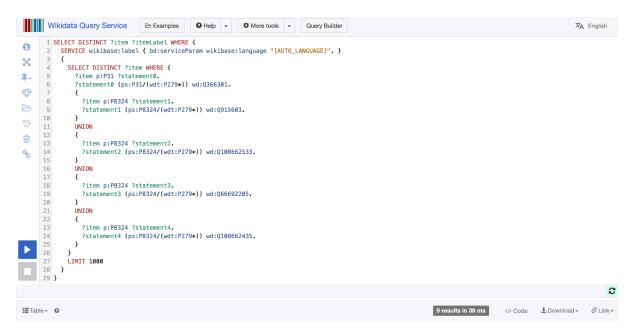
https://w.wiki/9VSM - On focus list of WikiProject Te Papa Expeditions - 119

expeditions		
Wikidata Query Service	Examples  Heip •	× <sub>A</sub> English
3 { 4 SELECT DISTINCT ?ite 3 ?item p:P5008 ?sta	<pre>{ bd:serviceParam wikibase:language "[AUTO_LANGUAGE]", } m WHERE {</pre>	
		0
⊞ Table - 0		119 results in 40 ms 🛷 Code 🛓 Download + 🔗 Link +
item	temLabel	\$
Q.wd:Q125817729	Allan Hancock Atlantic expedition	
Q, wd:Q239359	British Graham Land Expedition	
Q wd:Q125162776	Royal Society Expedition to the British Solomon Islands Protectorate 1965	
Q wd:Q125163357	THE / Muttonbird Islands Expedition 1955	

<u>https://w.wiki/9NF5</u> - Research Expeditions affiliated with Te Papa/National museum of New Zealand/Dominion Museum/Colonial Museum - 36 Expeditions

Wikidata Query Service	e 😂 Examples 🛛 🖌 Help 👻 🌣 More tools 👻	Query Builder						Ż	A English
X         3         {           4         5ELEC DISTINCT           7         71cem prP31 7s           6         71stacement8 (mp.P141)           9         7statement1           9         7statement1           11         WWTON           12         {           13         ritem prP141           14         WWTON           15         JStatement1           16         JWWTON           17         (tim prP141)           18         7item prP141           17         Vitem prP141           18         7item prP141           19         7item prP141           20         VitON           21         Z           22         Yitem prP141	abel { bd:serviceParam wikibase:language "[AUTO] ?item WHERE {	LANGUAGE]". )							2
Table - O						36 results in 42	18 ⟨⊅ Cod	e 🛓 Download +	S Link +
item	itemLabel								4
Q wd:Q121867527	Southwest Pacific Expedition 2017								
Q wd:Q124734595	Three Kings Expedition 1963								
Q wd:Q124734619	Three Kings Islands Marine Expedition 2013								
Q wd:Q124738071	Snares Islands Expedition 2013								

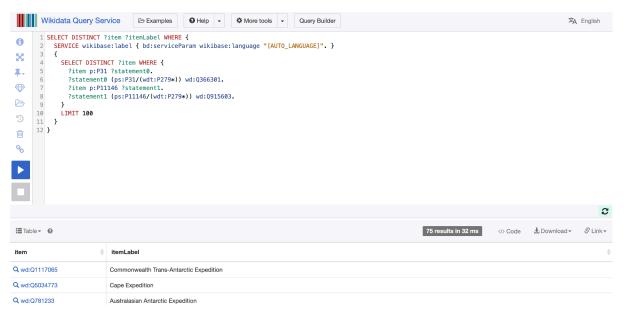
<u>https://w.wiki/9NF6</u> - Research Expeditions funded by Te Papa/National museum of New Zealand/Dominion Museum/Colonial Museum- 9 expeditions



<u>https://w.wiki/9NF8</u> - Research Expeditions sponsored by Te Papa/National museum of New Zealand/Dominion Museum/Colonial Museum - 0 expeditions

<u>https://w.wiki/9NFA</u> - Research Expeditions organised by Te Papa/National museum of New Zealand/Dominion Museum/Colonial Museum - 1 expedition

https://w.wiki/8vqt - Research Expeditions with collection items at Te Papa - 75 expeditions



https://w.wiki/9NEa - Research Expeditions with archives at Te Papa - 23 expeditions

Wikidata Query Service	😂 Examples 🛛 🛛 Help 🔹 🗱 More tools 🔹 Query Builder			ŻĄ	English
3         {           4         SELECT DISTINCT ?it           5         ?item p:P31 ?stat           6         ?statement0 (ps:F           7         ?item p:P485 ?stat	l { bd:serviceParam wikibase:language "[AUTO_LANGUAGE]". } em WHERE { ement0. 31/(wdt:P279*)) wd:Q366301.				
					2
II Table - Ø		23 results in 33 ms	Code	🛃 Download 🗸	& Link ≠
item 🔶	itemLabel				÷
<b>Q</b> wd:Q1031706	Discovery Expedition				
<b>Q</b> wd:Q125145058	St. George Expedition to the Pacific				
<b>Q</b> wd:Q12346864	Whitney South Sea Expedition of the American Museum of Natural History (1920-1941)				
<b>Q</b> wd:Q107359009	Kermadec Islands Expedition 1908				

## Research Expedition series item

The WikiProject Research Expeditions group highlighted the <u>Dominion Museum</u> <u>Ethnological Expeditions 1919-1923 Wikidata item</u> as an example of a well modelled research expedition series item. This item was shared with the Wikidata Wikiproject Research expeditions group to assist with the creation of Wikidata items for a series of research expeditions.

### Wikicommons Structured Data on Commons

Te Papa has previously uploaded specimen images into Wikicommons with structured data on commons. This project initiated further discussions on best practice for the addition of structured data on commons as well as on how to link images of holotype specimens collected during research expeditions. Siobhan Leachman advocated for the use of the <u>significant event (P793)</u> property. See for example the structured data tab on <u>this file</u> for an example of this linking.

## Visualisation tool and Infobox template

<u>Joaquim Santos</u>, a member of the WikiProject Research Expeditions project, created a research expeditions data visualisation tool and used a Te Papa related expedition as his test subject. See the <u>Research Expeditions story map site</u> showing the Dominion Museum expedition 1962-1963.



Image credit: Screenshot of <u>Dominion Museum Expedition 1962-1963 visualisation</u> <u>Open Data Commons Open Database</u> <u>Licence</u>

Lucy Schrader created an <u>Infobox expedition template</u> based on <u>Infobox</u> <u>person/WIkidata</u> that generates an English Wikipedia expedition infobox from data sourced for the research expedition Wikidata item. Visit the <u>Chatham Islands</u> <u>Expedition 1954 Wikipedia article</u> to see an example of this template in action.

## Structure of Wikipedia research expedition article

As a result of the research expedition editathons a suggested structure for a research expedition Wikipedia article was created. It is recommended that the article title be the standard year of the expedition and then the name of the expedition e.g. <u>1970 Three Kings Islands expedition</u> The proposed structure below is based on studying multiple research expedition Wikipedia articles.

The following is a list of suggested sections that may be appropriate to use when expanding a research expedition article.

- Origins / Planning a section outlining how the research expedition came about
- Funding the people or organisations that provided financial or in kind support for the expedition
- Members or Participants this can be a list or alternative a prose section mentioning as many participants as possible with information on participant roles, if available
- Aims / Objectives background on the aims or objectives of the expedition
- Research focus areas provides details on the focus of research and can give more information on who is responsible for this work
- Details / Expedition gives information on the expedition itself including the equipment used to collect items, what ships were used to sail on etc
- Itinerary or route start/end date, where the expedition went, what camps were used or locations visited, who went to each location, side trips during expedition
- Noteworthy events gives details on any noteworthy events occurring during the expedition
- Results of research / Research generated a section outlining research results. This can include the collections, hypotheses or publications generated from research undertaken during the expedition.
- Institutions that hold collection items (if held at multiple institutions)
- Legacy / Aftermath / Assessment if application this section gives details of the more historic view of the expedition
- Cultural references links to movies, books, tv programmes etc which might be related to the research expedition
- Bibliography appropriate if the expedition produced specific reports, may include the papers generated from collections obtained during the expedition

This suggested structure was shared on the <u>WikiProject Te Papa Research</u> <u>Expeditions events page</u>.

### Outreach undertaken

#### GLAMwiki newsletters

- <u>https://outreach.wikimedia.org/wiki/GLAM/Newsletter/February\_2024</u>
- https://outreach.wikimedia.org/wiki/GLAM/Newsletter/March\_2024
- <u>https://outreach.wikimedia.org/wiki/GLAM/Newsletter/April\_2024</u>
- <u>https://outreach.wikimedia.org/wiki/GLAM/Newsletter/May\_2024</u>
- https://outreach.wikimedia.org/wiki/GLAM/Newsletter/June\_2024

#### Conference abstracts and presentations

Abstract submitted but unfortunately rejected for <u>Wikimania 2024</u> Abstract submitted and accepted for <u>SPNHC-TDWG 2024</u>

• Conference organisers invited Siobhan Leachman and Lucy Schrader to draft an extended abstract to be published in the BISS (Biodiversity Information Science and Standards) journal and to present after the first plenary speaker thus presenting to the conference attendees in their entirety. This invitation was accepted and as at the 13th of June 2024 the abstract was drafted and submitted for review.

#### Presentation to the Te Papa Natural History team

#### **Events**

One of the benefits of having Siobhan Leachman as a Wikimedian in Residence at Te Papa was her participation in and supporting multiple Te Papa organised Wiki related events. This included the events supporting Te Papa staff to participate in the #1Lib1Ref campaign as well as the following two editathons.

Events undertaken relating specifically to the WikiProject Te Papa research expeditions were:

- A Te Papa staff research expedition editathon where Te Papa staff were encouraged to enrich Te Papa research expedition related articles or alternatively articles associated with Te Papa research expeditions.
- A public facing research expedition editathon where the general public were taught and encouraged to enrich a variety of articles associated with Te Papa research expeditions.

Blog

Siobhan Leachman and Lucy Schrader published a <u>Te Papa blog</u> about the Te Papa research expeditions project once the project is complete but prior to the public facing Te Papa research expeditions editathon. This blog is intended to educate the general public about the project and to also inspire attendance at the public facing editathon.

## Replicating this project

Should another institution or individual wish to replicate this type of project the following advice and recommendations may be of assistance.

## Aims of project

Thought should be given to the aims of the project as well as the platforms to which the research expedition information is intended to be added. Decisions should be made about whether the project wishes to concentrate on adding research expedition data to Wikidata, images to Wikicommons and/or to create or enrich research expedition articles in Wikipedia. It is possible the project may wish to undertake a variety of work in all of these platforms but the aims of the project should be in the forefront of planners minds when making such decisions.

## Data sharing considerations

#### Privacy

It is recommended that any research expedition project should take into account any privacy concerns of living participants of research expeditions when adding data on research expedition participants to Wikidata.

#### Indigenous data sovereignty

Where an expedition involves an Indigenous community and their knowledge, the institution should work with them to ensure any sharing of information is beneficial to the group and is appropriate to the situation.

Institutions should ensure they are supporting the data sovereignty of the indigenous community by exercising good data governance. For further guidance please read the <u>CARE Principles for Indigenous Data Governance</u> and the <u>Māori Data Governance</u> <u>Model</u>.

When working with communities, institutions need to be aware that there is a wide range of possible outcomes, including:

- No information is shared
- No information is shared, but the Indigenous community's ownership of the knowledge is made clear in the institution's collection management system
- Information held by the institution is shared with the community in a secure manner and integrated into that community's own research infrastructure

- A subset of information is shared, while ensuring the role of the indigenous community is clear and accurate
- Full expedition details are shared, with the institution assisting the community to run a Wikipedia editathon thus supporting the use of related information in local schools

Best practice in this area is unlikely to take the form of a prescribed, detailed process, as the goals and priorities of each community will vary. However, the following questions might provide some help when pursuing this work.

- Who has a stake in the land, specimens, objects, people, and knowledge relevant to the expedition?
- What forms do relevant data take? How would they become more accessible and how would they be used?
- How would sharing this data benefit the community? How might it be harmful?
- What contexts or limits need to be carried alongside any information shared? Look at the notices and labels applied by <u>Local Contexts</u>

It is recommended that institutions work with the relevant community to find answers to these questions.

#### Other data issues

Depending on the jurisdiction, there may also be other responsibilities project organisers should be cognizant of when contributing data to Wikidata. Discussing any concerns or possible conflicts with the institution's Data outreach manager or equivalent, may help alleviate concerns. Alternatively raising potential issues with the WikiProject Research Expeditions working group may also elicit further guidance.

## Planning

It is vital to meet with the staff of the institution, particularly the digital outreach manager or equivalent employee of the organisation to gain institutional and staff support for this project. The digital outreach manager or equivalent can help the project contributors in obtaining access to research expedition data and help guide the contributors in whether it is appropriate to share such data on a public platform.

Library and archives staff should also be met prior to commencement of project especially as information about an institution's research expeditions are likely to be held in the institution's library or archives department. This will help you understand how complete and accessible information about expeditions is - working from a compiled list is a very different project to doing the research yourself. Once the project commences, it is also vital to reach out to the curatorial staff of the institution. They will know of research expeditions they themselves have participated in and will also have institutional knowledge on their predecessors research expeditions as well as those research expeditions that are key to the specimen collections they curate.

## Funding

How to fund the project should also be considered by organisers. It is possible that the institution itself is able to fund staff time to add research expedition content to various Wiki projects. It is also possible that a funding application can be submitted to the appropriate Wikimedia user group, affiliate or chapter for partial or full funding for such a project. Should an institution wish to make an application to a Wikimedia group it is recommended that the institution reach out to that group prior to making the application for advice.

## Skills or training

If the institution or individual is aiming to add the majority of their information to Wikidata it is recommended that the person undertaking this editing work be experienced in contributing to Wikidata or at least be experienced with linked open data.

Understanding of the research expeditions schema and Wikidata editing norms is recommended. If the project is being undertaken by someone with limited Wikidata editing experience, time should be allowed for the development of that new editor's skills and knowledge.

When creating items on research expeditions the <u>research expedition Wikidata</u> <u>schema</u> should be followed. Any issues or questions about this schema can be raised with the <u>WikiProject Research Expeditions group</u>. Best practice documentation for this schema is currently being drafted (as at May 2024) and when published will give guidance on how to undertake this type of work.

### Resources

#### Wikidata

The following resources may be of use to an inexperienced Wikidata contributor:

- Learn Wikidata: a course for information professionals
- YouTube video How to manually edit Wikidata. (2 min 15 secs)
- YouTube video An Introduction to Wikidata. (22 min 34 sec) and the slide deck from this presentation.
- YouTube video A Gentle Introduction to Wikidata for Absolute Beginners [including non-techies! (3 hrs 4 min 32 sec)
- Wikidata gadgets (11 min onwards)

More experienced Wikidata editors may find the following resources useful:

- Mass edits on Wikidata how to use Google spreadsheets and Quickstatements (9:42)
- Bulk uploading data to Wikidata via OpenRefine

#### Wikidata tools

- <u>Cradle tool</u> once logged in with your Wiki username and password you can use the research expedition cradle form to create new Wikidata items for research expeditions.
- <u>Old SourceMD tool</u> this tool obtains the metadata for a scholarly article and populates a quickstatement batch (once you allow the quickstatements tool to edit Wikidata on your behalf) empowering you to create a Wikidata item for a scholarly publication using the publication DOI.
- <u>Author disambiguator tool</u> This is a tool for editing the author string statements for scholarly article items turning them from an author string statement to an author statement, thus linking the author item to the publication item. For more information see <u>this page</u> on this tool.
- <u>Scholia</u> Scholia is a service that creates visual scholarly profiles for topics such as research expeditions, people, organisations, species etc
- <u>BHL2Wiki tool</u> Similar to the Old SourceMD tool above

- OpenRefine free, open source tool for working with messy data
- <u>Mix'n'Match</u> This tool can list entries of external databases uploaded to Mix'n'match, and then allows users to match them against Wikidata items. For information on Te Papa's Mix'n'Match upload see <u>this blog</u>. This <u>useful</u> <u>video</u> demonstrates how to use the Mix'n'Match tool.

#### Wikicommons

For those inexperienced in bulk editing or uploading images to Wikicommons the following resources may be of use:

- <u>Youtube video with Sandra Fauconnier editing cultural heritage data in</u> <u>OpenRefine</u>
- Tutorial Batch uploading to Wikimedia Commons with OpenRefine

#### Wikipedia

New Wikipedia editors may find the following resources useful:

- English Wikipedia Help page has links on how to edit a page, contributing to Wikipedia, an introductory tutorial, and "getting started"
- How to Edit Wikipedia a 2018 tutorial (47 min 44 s)
- The Wikipedia Adventure
- University of Edinburgh Wikimedian in Residence website

### Outreach

Outreach involves the creation of communication opportunities to discuss the project as well as the organisation of events that let more people participate in extending the work of the project.

It is recommended that outreach be undertaken by the participants of a project. This includes communicating internally with the staff of the organisation as well as externally with various Wiki communities as well as with interested members of the public.

Project organisers should consider how staff within their organisation might become aware of or be kept up to date with the research expedition project. Examples of outreach may include presentations to select groups of staff, engagement with wiki editing groups at the host institution, and emails or staff notices about the existence of the project as well as to elicit staff engagement with the project.

For external outreach, appropriate avenues might include the <u>GLAMwiki newsletter</u>, <u>the Diff newsletter</u>, the talk page of appropriate Wikiprojects including the <u>Wikidata</u>

<u>WikiProject research expeditions discussion page</u> as well as associated Wikiprojects such as the institution WikiProject, if one exists, as well as the talk page for the WikiProject of the country in which the institution is located.



Image credit: <u>Screenshot</u> of the New Zealand report in the April 2024 GLAMWiki newsletter, Wikimedia Foundation, <u>CC BY-SA</u> <u>4.0</u>

#### **Events**

Consideration should be given on the focus of any editing events offered. Organisers should decide whether the event is aimed at staff or the general public. They should also consider the aim of the event, that is whether it is to encourage and teach participants to edit or alternatively whether the event is more focused on content creation in any particular Wikiproject.

Whether a Wikidata editing event is able to be run will depend on whether research expedition data is able to be accessed easily. For the WikiProject Te Papa research expeditions it was decided to pivot to Wikipedia editathons to utilise the research already undertaken to create Te Papa related research expedition Wikidata items. It was recognised that to expect participants to both undertake research on expeditions and then to also learn to edit Wikidata placed too high expectations on participants for a half day editathon.

## Conclusion

The 12 week WikiProject Te Papa research expeditions was successful in testing the proposed Wikidata schema for research expeditions. Issues were raised and suggestions for improving this Wikidata schema were shared with both the WikiProject Research Expeditions and the TDWG research expeditions task group.

The coverage of Te Papa related research expeditions in Wikidata, Wikipedia and Wikicommons was increased. A staff editathon event was held empowering Te Papa staff to engage with the Wikiverse. A public facing editathon was held to encourage new and experienced Wiki editors to improve research expedition information in Wikipedia, Wikidata and WIkicommons.

Research expedition Wikidata QID roundtripping in Te Papa's collection management system was agreed to and the linking of the research expedition records to specimens in the Te Papa collection management is currently being explored.

Finally, it is hoped by the authors of this report that the Wikidata Te Papa research expeditions project will inspire similar projects to be initiated at other natural history institutions to share research expedition data and content with the world.