

TE WĀNANGA TAIAO

Guided Day Education Sessions at Pūkaha



This resource is for kaiako thinking of visiting Pūkaha National Wildlife Centre for a day trip. Here, you'll find information such as session cost and maximum numbers, descriptions of the session content we can offer our kura, curriculum links and a guide on how to create a custom session with us.

Planning Details

Key contact:

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Overview:

Pūkaha offers a range of education options for your taura, whether they are early childhood, primary or secondary. We are a current provider of the Enriching the Local Curriculum (Ministry of Education) programme, with each Pūkaha session offering hands-on experiences for your taura to explore the ngahere. More information about these sessions and how they link to the National Curriculum can be found in the following pages.

Being the last remnant of Te Tapere Nui o Whatonga, a great forest that once stretched from Opaki-Kopuaranga (just north of Masterton) and stopped at Rakautatahi (north of Dannevirke), Pūkaha is a place steeped in rich history as well as being home to some of Aotearoa's most unique flora and fauna.

Student Ratios and Pricing:

For early childhood groups, we request one adult per two taura. For school groups aged 5+ we request one adult per six taura.

Pricing is as follows:

- \$6.00 per taura (all ages)
- Accompanying adults with the above ratio enter for free.
- Any additional adults outside of the above ratio are \$24.00 each.

If you brought 32 students and nine adults, five adults would be free. The rest would be included on the invoice at \$24.00 each.

Session Structure:

- 10:30am – 11:00am: Meet your dedicated guide, have your morning tea and a break.
- 11:00am – 12:30pm: Guided ngahere session.
- 12:30pm – 1:00pm: Lunch in our education room.
- 1:00 pm – 2:30pm: Guided ngahere session.

We appreciate the assistance of all teachers and adult helpers and note that they are directly responsible for the behaviour of the children in their designated group.

Standard Education Session

ECE – Year 10

Ideal group Size: 15 – 50 (max) learners and adults

Overview:

You've just stepped out from our wharenui and into an ancient forest with your class. The air is fresh, cool and clean. You can hear the bubbling of the stream next to you, mixed with the dinosaur-like screeches of kākā flying above. Down path you can see a flash of red – is it the bright feathers on the head of a red-crowned kākāriki or the pou of Tāne, ready to welcome your class into his forest?

You can expect to feel this and a whole lot more on our general guided education session, which grounded in local knowledge, history and the living world. Tauira get an overview of the history of Te Tapere Nui o Whatonga, how Pūkaha National Wildlife Centre came to be, and the local leaders/conservation experts that have all contributed to this rich history.

Tauira are guided through the ngahere to see aviary and wild birds, kiwi, tuatara, and lizards in our Nocturnal House, and will experience a tuna feed. Conversations will cover everything from the significance of protecting, restoring and enhancing biodiversity, the natural and cultural features of a place, the evolution and adaptations of endemic and introduced species as well as the impact of climate change on wildlife. This session can also be customised to suit you!

Learning Outcomes:

Through this experience in the ngahere, our key learning outcomes are for tauira to be able to:

- Tell stories of the local history, both ecological and cultural.
- Define and pronounce correctly several words in Te Reo Māori.
- Understand the adaptations of endemic species, the conditions under which they have evolved and how that links with Aotearoa's ecosystems past and present.
- Critique and reflect upon the role of people in conservation.
- Recognise there are a variety of different career opportunities when working in a space like Pūkaha.



Curriculum Links:

Day education sessions at Pūkaha can be incorporated into a range of learning areas for both the New Zealand Curriculum and Te Marautanga o Aotearoa. A selection of achievement aims have been listed below for context, which you can build upon if you wish to tailor this session to suit any particular needs.

Primary Students	
New Zealand Curriculum Level Three	Te Marautanga o Aotearoa Taumata 4
Health and Physical Education	Hauora
<ul style="list-style-type: none"> Healthy Communities and Environments 	<ul style="list-style-type: none"> Hononga ki a Ranginui rāua ko Papatūānuku
Science	Pūtaiao
<ul style="list-style-type: none"> Understanding about Science Ecology Evolution 	<ul style="list-style-type: none"> Te Ao Tūroa Ngā Tautake Pūtaiao Me Ngā Kōrero o Mua
Social Sciences/Aotearoa Histories	Tikanga-a-iwi
<ul style="list-style-type: none"> Tūrangawaewae me te kaitiakitanga 	<ul style="list-style-type: none"> Te Wāhi me te Taiao

Secondary Students	
New Zealand Curriculum Level Three	Te Marautanga o Aotearoa Level 4
Health and Physical Education	Hauora
<ul style="list-style-type: none"> Personal Health and Physical Development 	<ul style="list-style-type: none"> Huatau o te Whanaungatanga
Science	Pūtaiao
<ul style="list-style-type: none"> Living World - Ecology 	<ul style="list-style-type: none"> Te Ao Tūroa Ngā Tautake Pūtaiao Me Ngā Kōrero o Mua
Social Sciences/Aotearoa Histories	Tikanga-a-iwi
<ul style="list-style-type: none"> Tūrangawaewae me te kaitiakitanga Tino rangatiratanga me te kāwanatanga 	<ul style="list-style-type: none"> Hītori Matawhenua

"The information .. was just enough for their age and enough to ignite some passion for their environment. Your hosts were very knowledgeable and amazingly patient with the tamariki, a true asset to Pūkaha."

Paetumoki te Kura

"We all absolutely loved it. Our guides were fabulous. They were engaging, had excellent knowledge, and delivered at the level of our children."

Taonui School

Te Hīkoi o Pūkaha

ECE – Year 13

Group Size: 15 – 20 learners and adults*

*if you have a large group, we can split your class on arrival. Half the group will participate in Te Hīkoi o Pūkaha, while the other half will participate in our standard education session. Then, the two groups will swap after lunch.

Overview:

Te Hīkoi o Pūkaha centres Rangitāne by sharing their knowledge and history, and develops taura Te Reo Māori language and Te Ao Māori skills in an authentic context. In this session, knowledge that has been gathered from kaumātua in the community about Pūkaha, the history of this space and the region as well as information on Mātauranga Māori, pūrākau and rongoā is shared as taura walk through the ngahere. See Rangitāne carvers/kaiwhakairo in action at the whare whakairo, learn the pūrākau of the atua at the different pou throughout the forest. As always, a tuna feed is a highlight!

Throughout, taura participate in discussions about the history of Rangitāne at Pūkaha, the different ways of understanding Te Taiao, and how this contributes to the protecting, restoring and enhancing of biodiversity, as well as the close relationship between people and the environment.

Learning Outcomes:

Through this experience in the ngahere, our key learning outcomes are for taura to be able to:

- For taura that whakapapa Māori in particular, to recognise they have a wealth of existing knowledge they can contribute to discussions of Te Ao Māori.
- Demonstrate use of Māori language words and acquisition of new kupu or phrases specific to the context set at Pūkaha and pronounce them correctly.
- Indicate an understanding of the history of Pūkaha in a cultural context, both in terms of Rangitāne history and how Te Tapere Nui o Whatonga has changed with settler arrival.
- Discover that working within conservation can encompass a range of activities and be relevant for people from all backgrounds.



"Girls really enjoyed the stories that were told about the forest, the history and ecology of the area."

St. Matthew's Collegiate School

Curriculum Points:

Each education session at Pūkaha has a cross-curricular focus, and can be incorporated into a range of learning areas for both the New Zealand Curriculum and Te Marautanga o Aotearoa. A selection of achievement aims have been listed below for context.

Primary Students	
New Zealand Curriculum Level Three	Te Marautanga o Aotearoa Level 4
Learning Languages	Te Reo Māori
<ul style="list-style-type: none"> Language Knowledge Cultural Knowledge 	<ul style="list-style-type: none"> Puna Reo
Health and Physical Education	Hauora
<ul style="list-style-type: none"> Healthy Communities and Environments 	<ul style="list-style-type: none"> Hononga ki a Ranginui rāua ko Papatūānuku
Science	Pūtaiao
<ul style="list-style-type: none"> Understanding about Science Ecology 	<ul style="list-style-type: none"> Te Whakamahinga o te Pūtaiao Te Ao Tūroa Ngā Tautake Pūtaiao Me Ngā Kōrero o Mua
Social Sciences/Aotearoa Histories	Tikanga-a-iwi
<ul style="list-style-type: none"> Tūrangawaewae me te kaitiakitanga Tino rangatiratanga me te kāwanatanga 	<ul style="list-style-type: none"> Te Whakaritenga Pāpori me te Ahurea Te Wāhi me te Taiao Te Ao Hurihuri

Secondary Students	
New Zealand Curriculum Level Three	Te Marautanga o Aotearoa Level 4
	Te Reo Māori
	<ul style="list-style-type: none"> Puna Reo
Health and Physical Education	Hauora
<ul style="list-style-type: none"> Personal Health and Physical Development 	<ul style="list-style-type: none"> Huatau o te Whanaungatanga
Science	Pūtaiao
<ul style="list-style-type: none"> Living World - Ecology 	<ul style="list-style-type: none"> Te Whakamahinga o te Pūtaiao Te Ao Tūroa Ngā Tautake Pūtaiao Me Ngā Kōrero o Mua
Social Sciences/Aotearoa Histories	Tikanga-a-iwi
<ul style="list-style-type: none"> Tūrangawaewae me te kaitiakitanga Tino rangatiratanga me te kāwanatanga 	<ul style="list-style-type: none"> Tikanga ā-Iwi Hītori Matawhenua



Secondary Sessions at Pūkaha

Year 9 – 13

Group Size: 15 – 25 learners and adults*

*if you have a large group, we can split your class on arrival. Half the group will participate in the secondary session, while the other half will participate in our standard education session. Then, the two groups will swap after lunch.

Overview:

We have a range of existing sessions for secondary taura which align with current NZQA internal assessment standards. These sessions can also be used for Year 9 and 10 taura as introductions to particular topics. Our secondary options are ever-expanding, as we can develop custom sessions based on what you are covering in class.

Predator-Prey Cycles (Takahē Focus)

- **Aligns With:** AS91158 Investigate a pattern in an ecological community (2.6).
- **Duration:** 4 hours (shorter sessions possible).
- **Purpose:** Schools typically participate in this session once underway with the theory in class. It acts as a revision of adaptations, evolution and environmental pressures on endemic species, while highlighting the real-world impacts of predator-prey cycles, the conservation management techniques needed to manage a species and the opportunities for careers in conservation.
- **Session Overview:** This session starts with ethical activities that highlight the complexities of conservation in Aotearoa, before recapping the student's existing knowledge and building upon it, linking specifically with takahē. Taura participate in discussions about conservation management techniques and learn how to candle eggs. They then observe the takahē here at Pūkaha before learning how to check a trapline in the ngahere.



Great experience for the students. Staff were a wealth of knowledge. Really well run session in the hui room and guide through the ngahere.

Hutt International Boy's School



Introduction to Socio-scientific Issues

- **Aligns with:** AS91602 - Integrate biological knowledge to develop an informed response to a socio-scientific issue (3.2).
- **Duration:** 4 hours.
- **Purpose:** This session supports classwork around conservation-specific issues and enables taura to explore for and against points while having the opportunity for their questions to be answered by experts. Example topics covered are kiwi conservation, 1080 use, methods of pest control, biological implications of limited gene pools and mitigation strategies, fenced and unfenced sites, as well as ethical and economic considerations.
- **Session Overview:** This session starts with an in-depth ethical discussion and activity around conservation issues and techniques, before looking into the viability of hands-on species management. Taura have a guided session in the ngahere focused on conservation issues. The session finishes on a Q&A with different Pūkaha team members.

Five-Minute Bird Counts

- **Aligns with:** AS91158 Investigate a pattern in an ecological community (2.6), AS90925, AS91153, AS91601 (1.1, 2.1, 3.1).
- **Duration:** 4 hours, plus introduction session and optional wrap-up session (in person or via Zoom)
- **Purpose:** This session is designed for taura to go out and collect their own data to use in class, with guidance and support as necessary.
- **Overview:** The introduction session builds on work being done in class to identify local manu species by sight and sound, the relationships they have within the ecosystem and their potential niche. The session at Pūkaha is all about carrying out five-minute bird count surveys as a group to gather data at a number of designated survey stations. The follow-up session is both to help revise the data with the lead teacher (to understand possible trends) and discuss any preliminary findings with the group.



I really appreciated working with Kelly and she made sure that my students were able to do their 5MBC. I also appreciated being in contact with her after the session to discuss the data.

Chanel College

Adaptations of our Flora and Fauna

- **Aligns with:** AS91155 - Demonstrate understanding of adaptations of plants or animals to their way of life (2.3)
- **Duration:** 2 hours
- **Purpose:** This session has an underlying focus on gas exchange in invertebrates and fish, using stream and soil invertebrates as focus species.
- **Session Overview:** After an introduction, taura will head out into the ngahere and collect leaf litter samples to observe soil invertebrates and discuss their general adaptations. They will use equipment to observe spiracles in species, before moving on to stream invertebrates – in particular, observing their external gills. Taura then have a general tour, as well as observing the tuna feed.



Staff were really good. Both enthusiastic, passionate and knowledgeable related to standards, engaged kids well. Venue worked well.

Palmerston North Boy's High School

Other Session Options

- **Stream Health:** Data collection all about freshwater – for everything from nitrogen and phosphorus levels to macroinvertebrate counts. Perfect for investigations internals!
- **Tuna:** Specific sessions on the adaptations and life history of tuna, great for Level 1 taura.
- **Geography:** You can take a spin on our guided tour, and learn all about how Pūkaha can demonstrate the sustainable use of an environment.
- **Plant Identification:** Learn all about endemic plants and why they are so unique, as well as information about rongoā, Mātauranga Māori and local pūrākau.



Brilliant. The students learned a lot and were actively engaged, asking questions.

Tararua College

Custom Sessions and Outreach

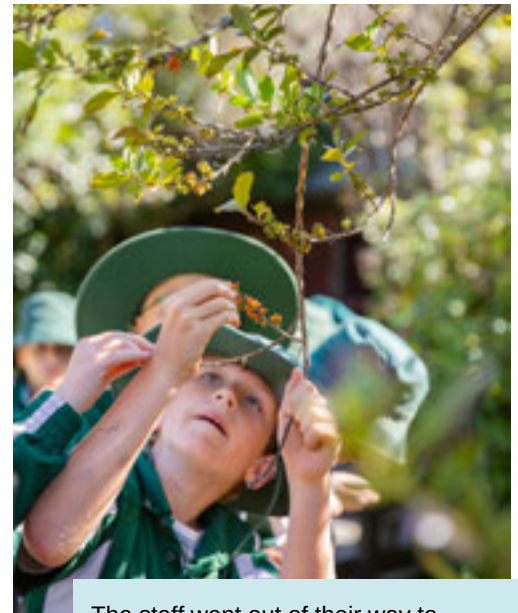
Custom Sessions at Pūkaha:

Just as for secondary sessions, we can also offer custom sessions for primary groups. These typically require advance booking, because we will work closely with you to design a session that meets the needs of yourself and your learners.

Enquire for a booking as you would normally, and our team will discuss your content focus with you. Then, we will design a session plan based on this information and send it to you for review and revision as necessary. Once the plan is approved, the session is confirmed.

Example: Natural Flight

- This is a custom session designed for a full-school visit (Year 1-8 students). The focus was natural flight, with a focus on how different birds and insects have different shaped wings (and feathers) and these adaptations support them to inhabit different environments.
- The content covered everything from the differences between flying, floating and falling, the importance of wings and feathers for powered flight in birds, flight in invertebrates, how different wings can mean different forms of flight and of course, what bird flies the longest distance without stopping, with practical activities to support each of these concepts.



The staff went out of their way to support the students and did an excellent job of sharing their knowledge of natural flight with us. Having a few hands on props (feathers) made it more real for the taura.

Whareama School

Outreach Sessions:

Now, Pūkaha can come to you! Outreach sessions are typically customised to be local to your school and what you are covering in class. They can be anything from 1 – 3 hours duration, and involve spending the bulk of the time outside, using nature connection activities. Outreach sessions can meet multiple parts of your local curriculum, and are designed using the same process as described above.

We've run sessions that help meet measurement and statistics achievement objectives by placing out tracking tunnels and chew cards, for students to collect predator data to analyse. We've also carried out stream surveys, where measuring water velocity and other physical characteristics of the stream met the measurement topic focus, and surveying for invertebrates and algae cover met statistics.

To cover the cost of travel and time, Pūkaha does require a koha for outreach sessions.