

# EcoBuzz

EcoBuzz Edition 69

Term 1 2018



Room 15 from Wakefield School enjoy the potatoes they grew. Story page 8

**IN THIS ISSUE:** opportunities galore – Moturoa Mission, NZAEE conference, Enviroleaders Hui, fashion swap, submission making.

## Kia ora tatou

Food is something we all have in common – everyone needs to eat. What happens to our food security when not only the fridge and pantry are bare, but also the supermarket shelves?

Recent events in Takaka brought home how quickly supermarket shelves can empty when roading or transport is disrupted. A strong local food network is vital. You can't get much more local than food you grow yourself, be it at school or home.

What exactly is 'local food'? Definitions vary, however, many say it is food produced within 150km. Being a locavore, a person who eats local food whenever possible, could be one of the best things you can do for the planet. Food miles are a major contributor to climate change. (For more on environmental foot printing, measuring a household's environmental impact through things like transport, energy use and food, see [www.ecofootprint.nz](http://www.ecofootprint.nz))

School gardens can grow some vital emergency food supplies, but they can also build resiliency by upskilling young gardeners who take their skills home, demonstrating to others what grows well locally and providing a community example for others to learn from. So please keep that vital school garden humming and ask for help – it is an opportunity for others to share and/or learn. Please enjoy the potato story from Wakefield school demonstrating just this.

There are several fantastic opportunities coming up over the next few months. We do hope you can benefit from them.

*Thanks Adie, Heather, Joanna and Claire*



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## The Team

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## Who you gonna call for Support?

Did you know the Ecobuzz and Enviroschools team; Claire, Heather, Joanna and Adie can provide you with support for your theme planning to inspire great inquiry that you may not have thought of? They have access to a range of resources and connections through their roles as Enviroschool facilitators and as employees/contractors of your local council.

### 1. Zero Waste

- Reducing and appreciating what we have
- Reusing, upcycling ideas, making best use of resources
- Recycling and composting
- To book a Tour of Recycling Centre
- Digesting Love Food Hate Waste
- Redesigning Product life cycles
- Planning a Zero Waste event
- Undertaking a waste audit

### 2. Water

- Waterways – wetlands, estuaries, streams, lakes and rivers
- Stream life, eels, riparian margins
- Stormwater – drains are for rain, water cycle, protection, flooding
- Water conservation and rainwater harvesting
- Greywater and wastewater uses

### 3. Landscape, Biodiversity Conservation and Bio-security

- Native plants – seed collecting, growing, plantings, monitoring
- Pest animals – tracking, trapping
- Pest plants – identification, uses, Plant me Instead, removal
- Living landscapes – gardening, ecodesign

### 4. Also Energy, Air quality, Transport options



## Looking to the Horizon – goodbye from Adie

I have the pleasure of passing on the Regional Coordination of Tasman Enviroschools role to Claire Webster, in Golden Bay, so I can become a part time student at NMIT. I will also retire from my TDC role in May.

Claire Webster does a wonderful job as the Enviroschools facilitator in Golden Bay and already knows all of the schools and some of the staff from when she worked on this side of the Takaka hill in various roles.

All going well, I will have the pleasure of introducing the new Educator/Enviroschools facilitator to all the Tasman schools and ECEs that I have enjoyed working with in some way over the 6 years in my role here and 14 years with the Enviroschools Programme.

Years ago, I heard that you can take the person out of Enviroschools but you can't take Enviroschools out of the person. I would agree, as the practical and holistic educational process of Enviroschools is an educator's bees knees. I have loved its rich process to empower students to lead and be inspired carers of our environments. Of course, great teachers achieve this shift. Thank-you to all for your mahi and care.

Adie Leng





Help your students have a real say!

## Respond now, prepare for the future with Long Term Plan

Make a submission: Visit [www.tasman.govt.nz/LTP](http://www.tasman.govt.nz/LTP)

Or post to LTP Submissions, Tasman District Council, Private Bag 4, Richmond 7050

Email to [info@tasman.govt.nz](mailto:info@tasman.govt.nz)

Consultation closes 5.00 pm, Thursday 5 April 2018

## Motupipi River Willow Eradication and Restoration Project – ‘Mr Werp’

The Motupipi River has historically been one of Golden Bay’s unhealthy rivers, but its future seems sparkling. A community project will this year begin a project to remove the crack willows choking the river and to replant the banks, which is expected to result in a free-flowing, healthier river.

The removal and restoration project is the focus of the five-year Motupipi River Willow Eradication and Restoration Project (MR WERP). The project group has funding from Tasman Environmental Trust, Tasman District Council and the Fonterra Grass Roots Fund. Takaka Primary School will be learning about the River, the project and helping with the replanting over the next few years.

As work progresses, there will opportunities for school groups to study the changes and help with planting the river riparian zones. Watch this space.





## China's decision provides Incentive for Real Recycling

For decades, recycling in the developed world has relied on China accepting mixed and dirty recyclable material and sorting it out using extremely cheap labour. In January, China banned imports of plastic packaging and 23 other types of solid waste and brought in much tighter limits for contamination of recycling on 1 March.

With change comes opportunity. Taking responsibility for our waste on a personal, community and government level will be a giant step towards a zero waste future. The Zero Waste Network wants us to drive 'real recycling' for recycling to live up to its name; i.e. clean, uncontaminated recyclable material that preserves its future usefulness. In addition, New Zealand could bring in systems to encourage 'real reuse' e.g. using deposit-refund schemes. *(Adapted from article by Marty Moffatt, NZ Herald 13/2/18)*

*PET = Polyethylene terephthalate look like this*



## So where does our local plastic recycling go?

The Richmond Resource Recovery Centre, which collects all kerbside recycling material from Tasman and Nelson, has an efficient sorting system that retains reasonably low contamination levels of materials.

At present, the plastics...

**PET** is going to Lower Hutt –

<http://www.scoop.co.nz/stories/BU1801/S00500/flight-plastics-recycles-first-1000-tonnes-of-pet-bottles.htm>.

*\*Note in the article, the effectiveness of developing a circular economy.*

**HDPE** is going to a new Christchurch base of an Australian company <http://astronplastics.com.au/>

**Mixed plastics** are being stockpiled at present.

*\*This issue is a good incentive to talk about why we need to REDUCE and REUSE and why recycling is like a band-aid for excessive consumption.*



*HDPE = High-Density Polyethylene*

## Make a booking to see the RRRC

If you want to know more about the Richmond Resource Recovery Centre and to see the range of items and quantities that get recycled contact Adie to organise a tour. [Adie.Leng@tasman.govt.nz](mailto:Adie.Leng@tasman.govt.nz) or 03 543 7222. Conditions apply = students need to have knowledge about the 3Rs, life cycles and which materials can be recycled. Contact Heather, Claire or Adie for this support.

## More about products with plastic waste:

Think about the plastic in wasted clothing [http://www.huffingtonpost.co.uk/entry/plastic-free-are-we-missing-the-bigger-picture\\_uk\\_5a73439ce4b0cb405dd1fc0c](http://www.huffingtonpost.co.uk/entry/plastic-free-are-we-missing-the-bigger-picture_uk_5a73439ce4b0cb405dd1fc0c)

And E-waste <https://www.radionz.co.nz/national/programmes/checkpoint/audio/2018630816/what-happens-to-our-e-waste>

## Moturoa Mission is happening again on 11 April

### Theme: Building Resilience for a Changing World

Two enviro-leader teams from each Nelson and Tasman Enviroschool, in Years 5-8, and a teacher are invited to experience a great day building teamwork, and relationships with a range of agencies, while undertaking some fun environmental learning experiences and inspiring challenges at Conifer Park on Rabbit Island.

Different agencies like Plant & Food Research, Project Janszoon, Brook Sanctuary, Natureland, Forest & Bird, Sport Tasman, NZ Marine Studies Centre, and councils will run different stations. Secondary school Envirogroups will also be leading activities during the day. Register by 29 March.


**ENVIROSCHOOLS**  
**MOTUROA**  
**MISSION 2018**

Building Resilience  
in a Changing World

**VENUE:** Conifer Park **TIME:** 10am - 2pm

Each team will complete 4 activities with 40 minutes at each station.

April 11

## Envirogroup Support

Bringing your envirogroup together for the start of the year, keen for some support?

We can support with a “what is Enviroschools’ or “finding our school vision “session for your Enviroschools students. This will link well with the upcoming “Moturoa Mission – day of action and learning”

## Nelson Library displays

Joanna has been in discussion with the Nelson library’s children’s department and has provisionally booked the Children’s tunnel display area for the following dates. If your school would like to use this space to share your journey around sustainability please get in contact with us asap to reserve your spot.

19th–25th March, 21–27 May, 18–24 June, 13–19 August, 10–16 September,

5–11 November, 3–9 December

3D Printer – the library has one and is interested in collaborating with schools who have projects that could utilise this resource.

## Race Unity Day 18 March [www.nelsonmulticultural.co.nz](http://www.nelsonmulticultural.co.nz)

**Links to Enviroschools guiding principle of respect for diversity of people and culture and Sustainable communities**

Sunday 18th March 11am–4pm at Victory Square Park. One in four people in the Nelson Tasman region is born overseas and this day is evidence that ours is a truly multicultural community!

## World Water Day 22 March <http://worldwaterday.org/>

Nelson City Council will have a stall at the Isef Park Market so come along and visit us and meet some of our aquatic neighbours.

## Secondary Enviroleader student Hui Saturday 24 March

For the third year Enviroschools and DOC will host representatives from school Envirogroups as we support them to launch their enviro journeys for the year. More information will be emailed soon.

## Time Travel Challenge

**Links to the Enviroschools guiding principles of Learning for sustainability, Sustainable communities and the Precious Energy theme area**

Enviroschools Nelson is partnering with the Heritage team at NCC to bring you an exciting competition. More information will be emailed soon for Nelson Schools.

## IDEAS festival 11-12 March

**Links to the Enviroschools guiding principle of Empowered students**

<https://www.eventfinda.co.nz/2018/ideas-festival-primary/nelson>



## Potatoes at Wakefield School

The Room 15 children last year wrote to Bunnings to ask if they had any seed potatoes. Sian took the letters to Bronwyn who works there.

They were very kind and gave us lots.

In term 4 we planted the seed potatoes. They grew all through the summer. When we came back to school this term we hunted under the hay for the new potatoes that had grown.

We found lots. We washed them, we chopped them up and we cooked them. We made chips.

They were hot.

They were good.

They were yummy.

They were delicious.

Thank you Bunnings.

*Matai Kēreru Room 13,*

*Year 1*

*Wakefield School*

1



2



3



*1 Sian's potato letter to Bunnings*

*2 Growing the potatoes*

*3 Gabrielle's potatoes*

*4 Courtney and Sian's potatoes*

*Cover photo – eating hot chips!*

4





## Evolocity in Tasman Schools

Waimea College grew from one team of two in 2015, to 22 students and 10 teams creating electric vehicles for Evolocity in 2017. Motueka High School had 5 teams with 15 students and constructed an electric car in 2017. Both schools entered the Evolocity national finals in Christchurch and while they all thoroughly enjoyed the experience, Waimea came away with three wins. Motueka was not able to capture the supreme Evolocity championship that they had achieved the previous two years in a row.

In 2017 at the national finals in Christchurch, Waimea College won 3 events - (all to different vehicles!)

- The Fastest Drag Race for Bikes
- The Fastest Street Circuit for Karts
- And Best Economy Run for Bikes

Was a scorching hot day - was great to have 100% reliability across the team.

Find out more from the Evolocity Facebook page <https://www.facebook.com/evolocitynz/>

*Will Taylor - Waimea College*







## NZAEE Conference

An Ecosystem for Environmental Education  
He Pūnaha Hauropi mō te mātauranga a taiao  
18-20 April 2018, Wellington



Conference Website: <http://www.nzaeeconference.nz/>

New Zealand Association for Environmental Education (NZAEE)

### 8th Biennial Conference: An Ecosystem for Environmental Education

Wednesday 18– Friday 20 April 2018 Wellington Girls College, Wellington, New Zealand

## FASHION REVOLUTION “Swap ‘til You Drop”

Nelson’s biggest-ever **QUALITY** clothes swap for teens, women and men.

Fashion Revolution Nelson Tasman are holding a jumbo clothes swap as part of the 5th World Fashion Revolution Week.

There will be information stands, advice on clothes up-styling and a chance to join in the world’s largest and most effective fashion campaign by asking brand names #whomademyclothes.

When: Sunday 29 April 2018 from 10am to 2pm.

Where: Energy Centre, Founders Park. Entry: \$2

#### Rules:

- Teen’s, women’s and men’s clothes only (no babies or children’s clothing, no shoes, no underwear/intimate clothing).
- All clothes donated must be washed, in good condition and well presented.
- Clothing can be dropped off at the Energy Centre on Friday 27 April from 2–6pm and on Saturday 28 April from 10–2pm, or bring early on the day.
- Redeem tokens for swapping will be given for each item accepted. Limit of 5 items per person.





NZAEE Seaweek 2018 started on Saturday 3 and ran until 11 March 2018. The NZAEE Seaweek theme for 2018 is "Toiora te Moana – Toiora te Tangata – Healthy Seas, Healthy People".

The events have entertained and educated! If you'd like to get involved in Seaweek **2019** by organising an event, no matter how small, we can help – just let the National Coordinator know your plans by emailing Mels Barton on [mels@subliminal.co.nz](mailto:mels@subliminal.co.nz)

We were overwhelmed that our programme included over 225 events for the first time ever. They are all up on our website at [www.seaweek.org.nz](http://www.seaweek.org.nz), so check your region's page to find out what happened near you.

If you attended a Seaweek 2018 event you can win a copy of **The Collins Field Guide to the NZ Seashore** by completing one of our **online Evaluation forms** to tell us what you enjoyed about the event.



## Local Free Conservation Education Resources



### [Marlborough conservation education toolbox](#)

**Field trip | All levels:** This resource is designed assist teachers in selecting appropriate conservation education experiences in Marlborough.

Engaging, New Zealand Curriculum-linked resources that provide current and real-life contexts for learning Conservation resources to use inside and outside the classroom – inquiry units, factsheets, videos, outdoor investigation activities and more! Easy to find – search for resources by topic or by curriculum learning area. DOC-supported programmes for you and your students to get involved in.

Here is a brand new education reference resource from Marlborough – this is one out of the box as it uses community groups as the key educators (relieving pressure on rangers) and it is fully curriculum linked. I think it could well work in other places too. See some of the activities from:

[Http://www.doc.govt.nz/marlborough-conservation-education-toolbox](http://www.doc.govt.nz/marlborough-conservation-education-toolbox) at the end of this issue.

# Provider Update

**Mountains To Sea**  
Conservation Trust  
*Nga Maunga ki te Moana*

**whitebait Connection**  
Discover about freshwater life

**Experiencing Marine Reserves**  
EMR

"I love learning about the interconnectedness of it all. The way the water connects the mountains to the sea and the people too"

"It is great to know that there are lots of people out there who care for the natural environment in this country when I see what I need to do a sustainable life plan I cannot wait"

**Our goal is to empower and support communities to achieve marine and freshwater conservation through science based experiential programmes, resources, projects and community engagement.**

**Whakamana te maunga Whakamana te wai He mauri o ngā tangata Ngā mea katoa he pai**  
If we look after the water from the mountains to sea, it will look after us. It is our life force.

visit [www.emr.org.nz](http://www.emr.org.nz) and [www.whitebaitconnection.co.nz](http://www.whitebaitconnection.co.nz) and [www.mountaintosea.org.nz](http://www.mountaintosea.org.nz) or email us at [info@emr.org.nz](mailto:info@emr.org.nz)

## Mountains to Sea Wānanga A national marine and freshwater conference “Succession”

For marine and freshwater conservation action and education  
Saturday 21st April – Monday 23rd April 2018  
Te Āwhina Marae, Motueka, Nelson-Tasman

Registrations essential  
**\$390** waged professional,  
**\$290** non waged/student/teacher/not for profit

For more information, registration details and invoices contact  
Kim Jones (09) 425 5681 or 027 243 4818 or [kim@whitebaitconnection.co.nz](mailto:kim@whitebaitconnection.co.nz) or  
visit <https://goo.gl/forms/oWrY8ZjuurgQLBE23> to complete the online registration.

### Find FREE conservation education resources online

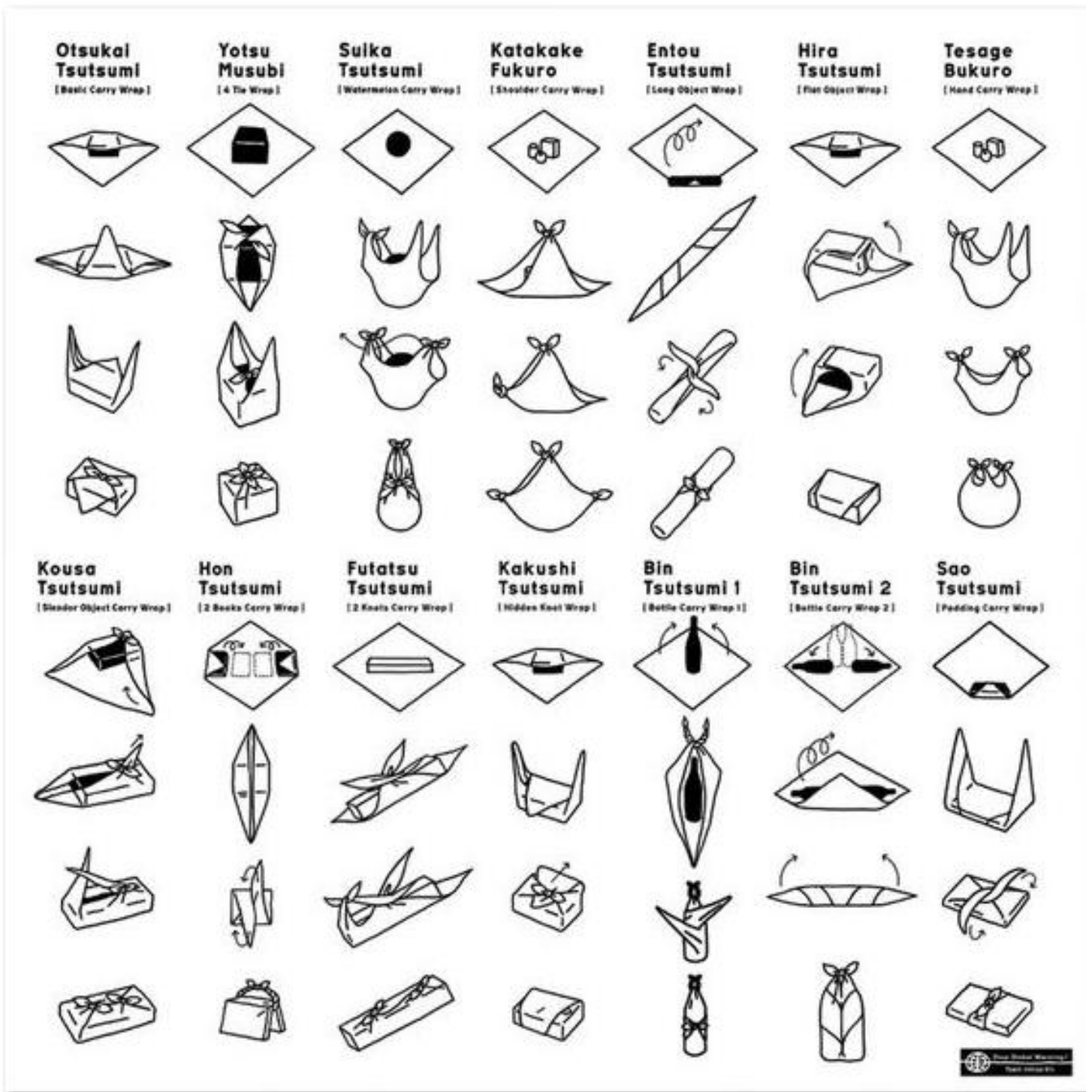
[www.doc.govt.nz/education](http://www.doc.govt.nz/education)

- Engaging, New Zealand Curriculum-linked resources that provide current and real-life contexts for learning
- Conservation resources to use inside and outside the classroom – inquiry units, factsheets, videos, outdoor investigation activities and more!
- Easy to find – search for resources by topic or by curriculum learning area
- DOC-supported programmes for you and your students to get involved in

Department of Conservation  
Te Papa Atawhai



## Activity One: Japanese eco material wrapping - Furoshiki



## Activity Two: Seashore Survivors



These activities are examples from

<http://seaweek.org.nz/wp-content/uploads/sites/26/2018/02/FIELD-GUIDE-NZ-ACTIVITY-BOOK-proof-7.pdf>

Life is tough on the seashore – but there is a large diversity of plants and animals that live there – so how do they survive? Suggest your students make a table with two columns. Label the first column ‘problems’ and the second column ‘solutions’. Suggest they list all the problems seashore species have to deal with at low tide when they are exposed to air (eg. heating up, drying out) and then list how animals might cope with the problem (eg. shell

with trap door pulled shut, hide under rocks or seaweed).

For each problem there maybe multiple solutions. This activity could be extended by doing a second table for problems encountered with the tide is high (eg. hungry fish). Include problems caused by humans (eg. rocks turned over) and encourage students to act on the solutions they suggest.

## Rules of the Road

We all know that when we ride a bike there are various rules that we must follow and actions that will help keep ourselves safe.

Have your students design a sign or pamphlet on Seashore Safety. It should include actions to keep the animals and plants safe, guidelines to keep seashore explorers safe and recommendations for when and where to explore. A list of useful equipment to bring on their next seashore excursion could be included.



## Name the Coastal Natives



New Zealand is renowned for its unique wildlife and the seashore is no exception. Each student (or group of students) may choose a different group of animals or plants to investigate.

Draw a series of three nested circles. In the inner circle, list species (eg. crabs) found only in NZ. In the next circle include species found in NZ and Australia. In the outer circle, list species found in the Southern Hemisphere or worldwide. With a green highlighter tag those that are endemic, only found in NZ. Use yellow to tag species that are native, naturally found in NZ but also found in other regions. Use pink to tag those species that are invasive, introduced into NZ waters from other regions. What percentage of species are endemic, only found in New Zealand? Discuss why this is important to know. Investigate how species are introduced to NZ waters and how NZ species are transported to other parts of the world. What impact is this having and how can it be controlled?