

Creating a frog-friendly habitat

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OCTOBER 2020



*Online Leadership
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Water Future



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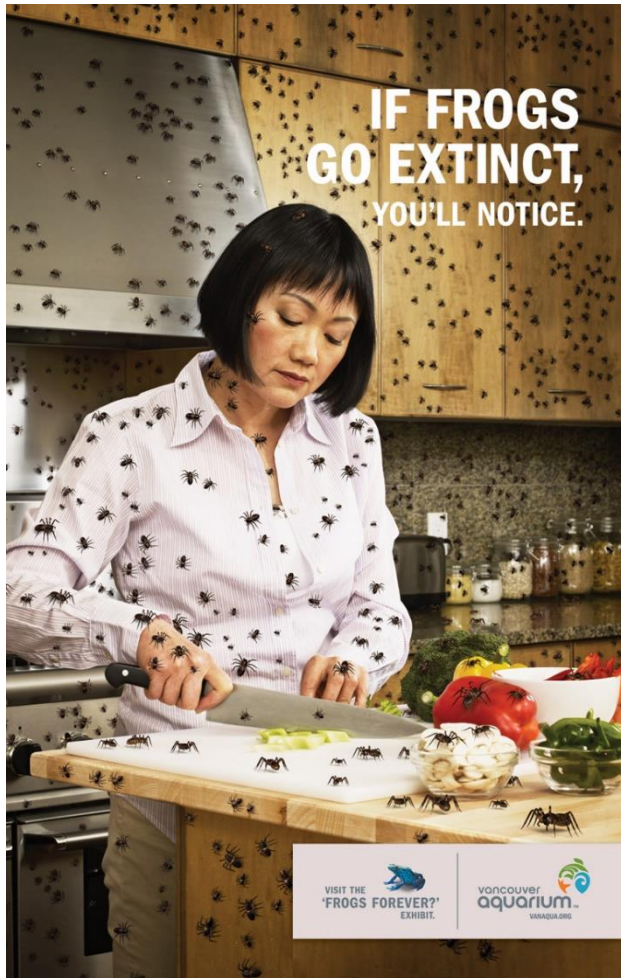




Melbourne Water Frog Census

Creating a Frog Friendly Habitat

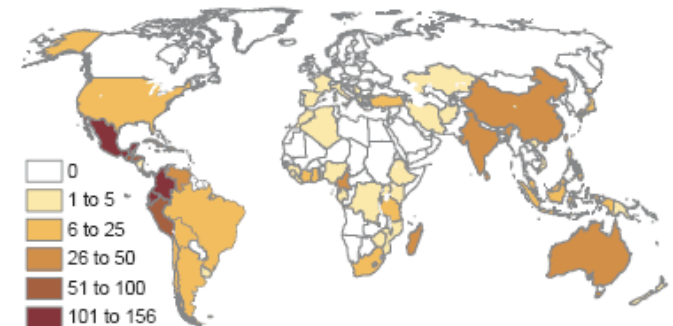
Why care about frogs?



One-third of amphibians threatened

Nearly 2,000 species of amphibians are currently endangered. *Batrachochytrium dendrobatidis*, an amphibian chytrid fungus, is thought to be a major reason for the decline in population.

Number of threatened amphibian species, by country, May 2006



SOURCE: The International Union for the Conservation of Nature and Natural Resources

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Melbourne Water Frog Census



Why build a Pond?

Frog ponds are constructed breeding habitats for frogs - for egg-laying, tadpole development and damp refuge in dry summers

Link up populations

Backyard nature

Free organic pest control

'Off-line' habitat safe from pollution



Q. Why build a pond? A. Frog babies.



Before you start

Considerations:

Q. Budget

Q. Land tenure, buried services

Q. Maintenance – who looks after it?

Q. What is your landscape context? Do any frogs live near you?

Q. How long can you commit to having the pond for?

Q. Water source?



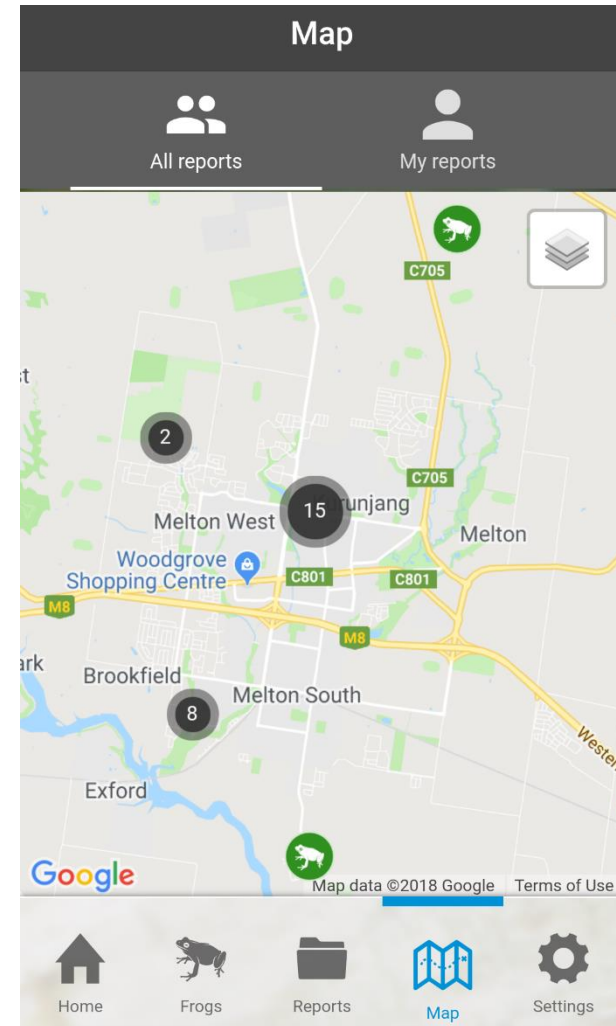
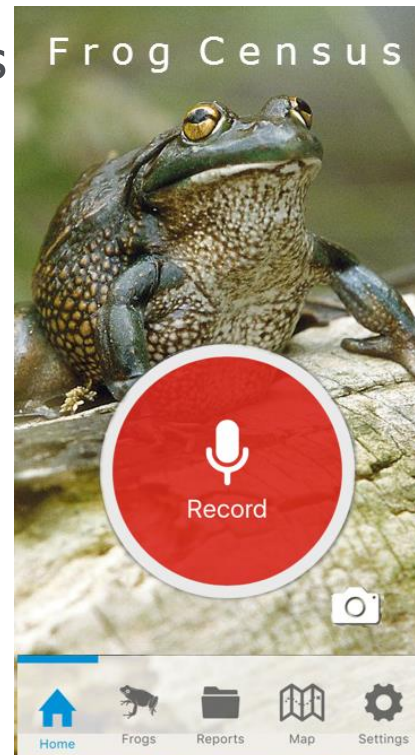
What frogs live near you? What might turn up?

Before you build:

Q. What is your landscape context?

Q. How to find out if any frogs live near you

***don't introduce frogs**



Pond location

Where to locate the pond:

- Sun and shading
- Large trees – shading, leaf fall, roots, bird droppings
- Water supply/drainage/run-off
- Is the surrounding terrestrial habitat 'frog friendly'?
- Neighbours
- Safety
- Soil profile

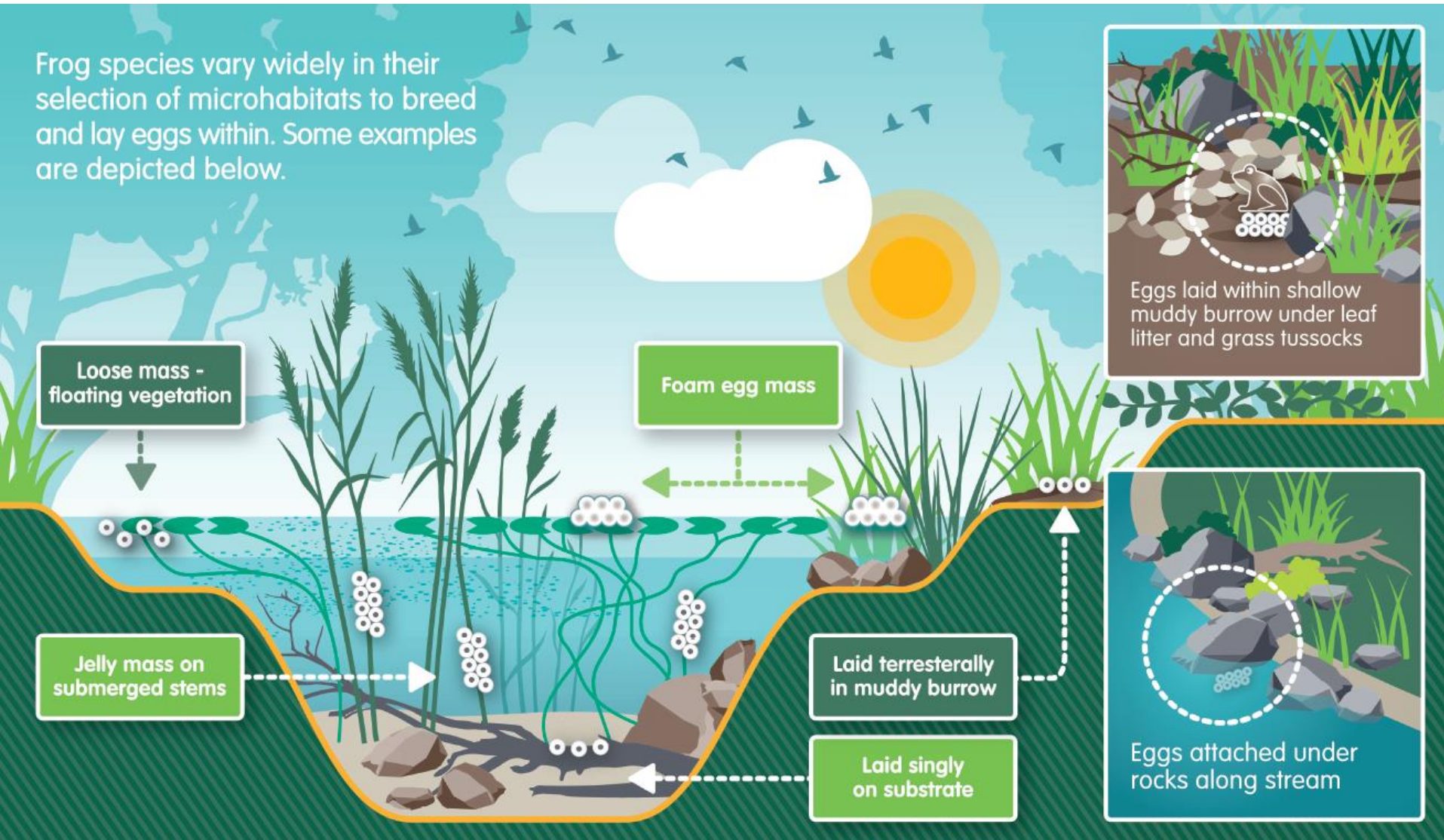


Pond safety



Understand frog biology to understand pond needs

Frog species vary widely in their selection of microhabitats to breed and lay eggs within. Some examples are depicted below.



Eastern Common Froglet

Crinia signifera

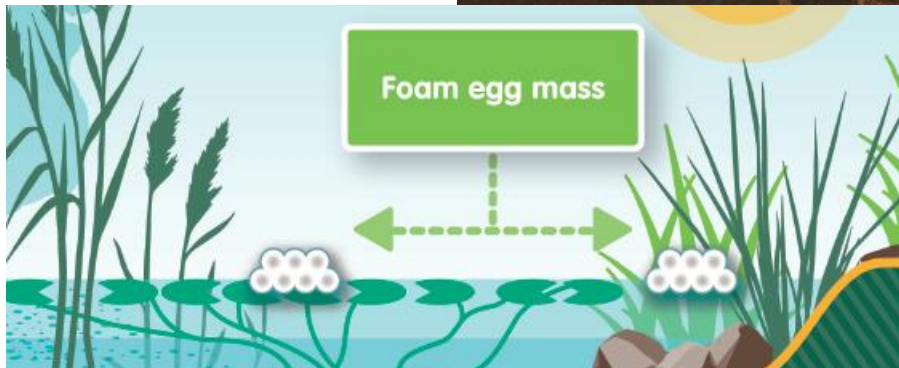


Image: Peter Robertson



Eastern Banjo Frog (Pobblebonk)

Limnodynastes dumerilii



Southern Brown Tree Frog

Litoria ewingii

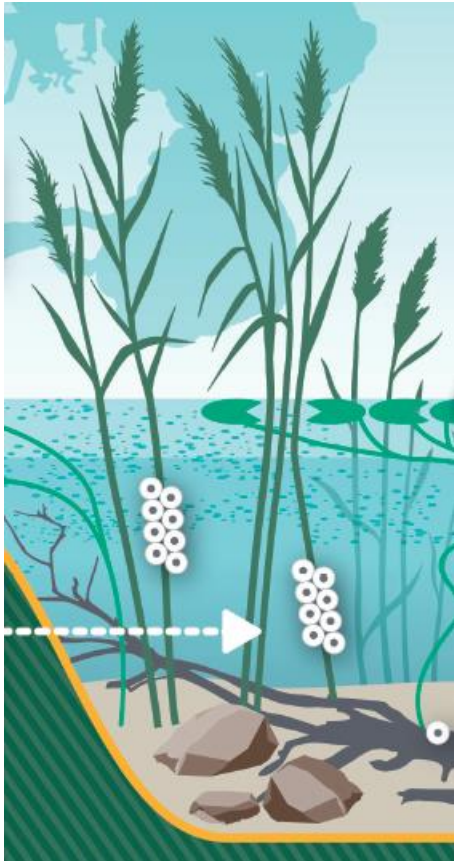
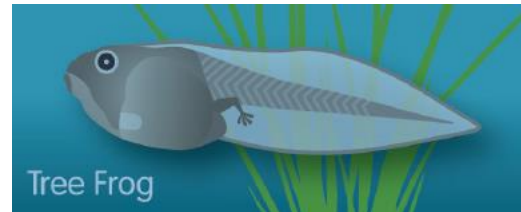
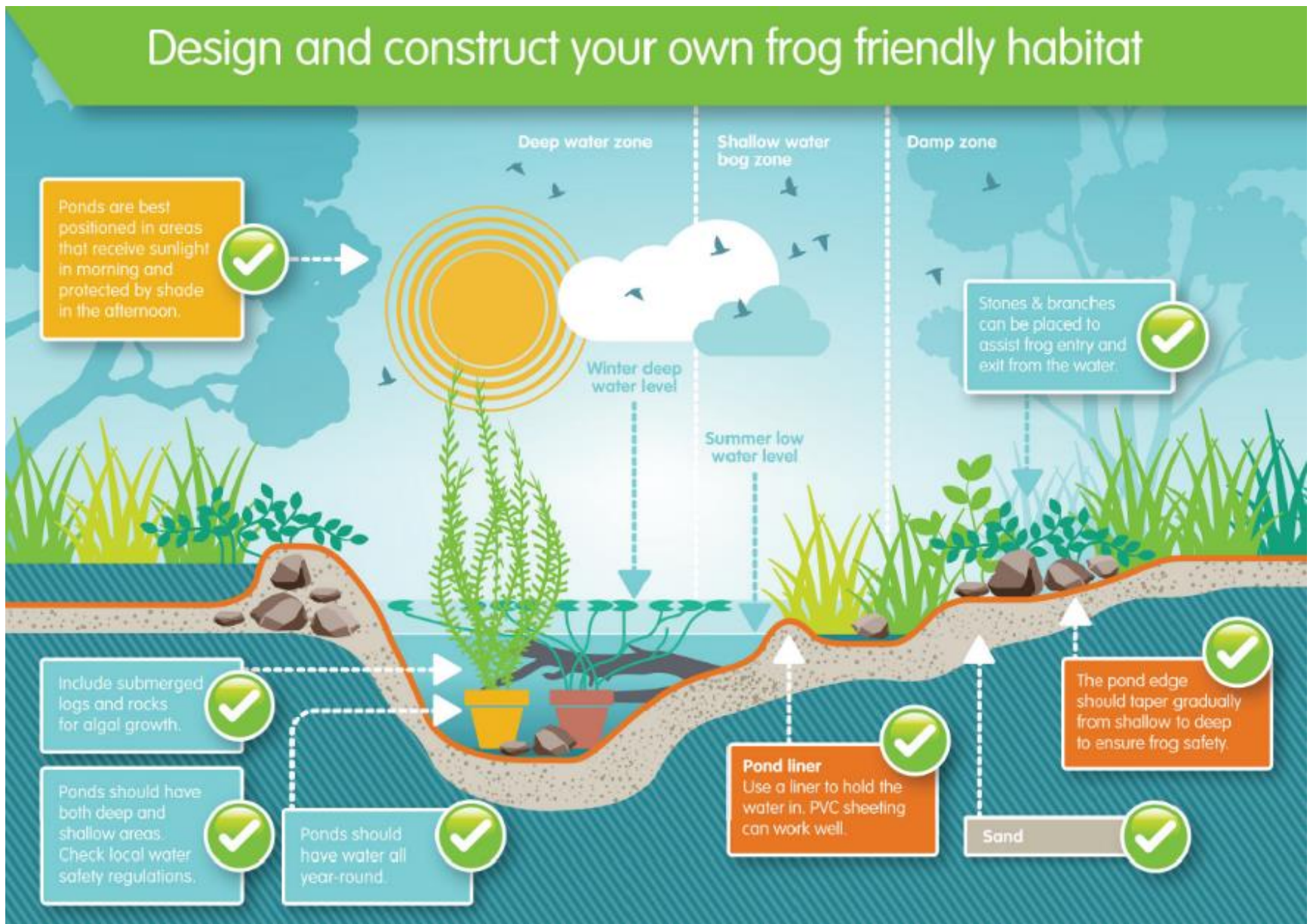


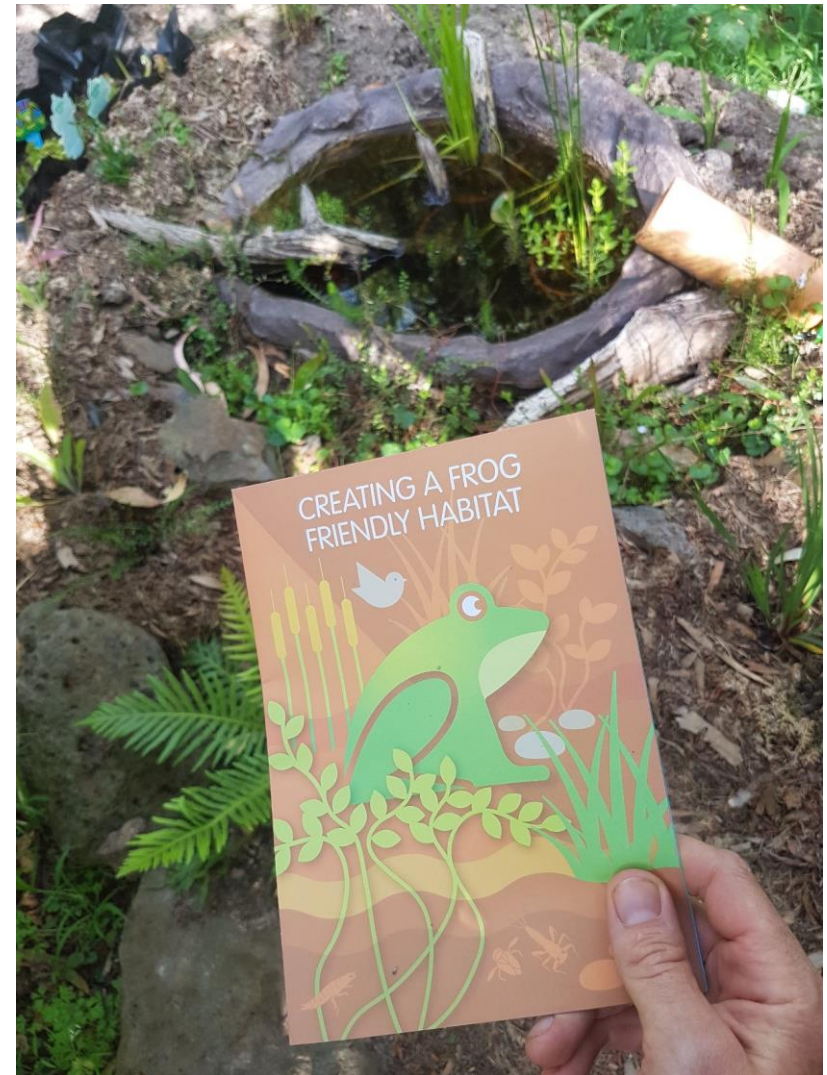
Image: Peter Robertson



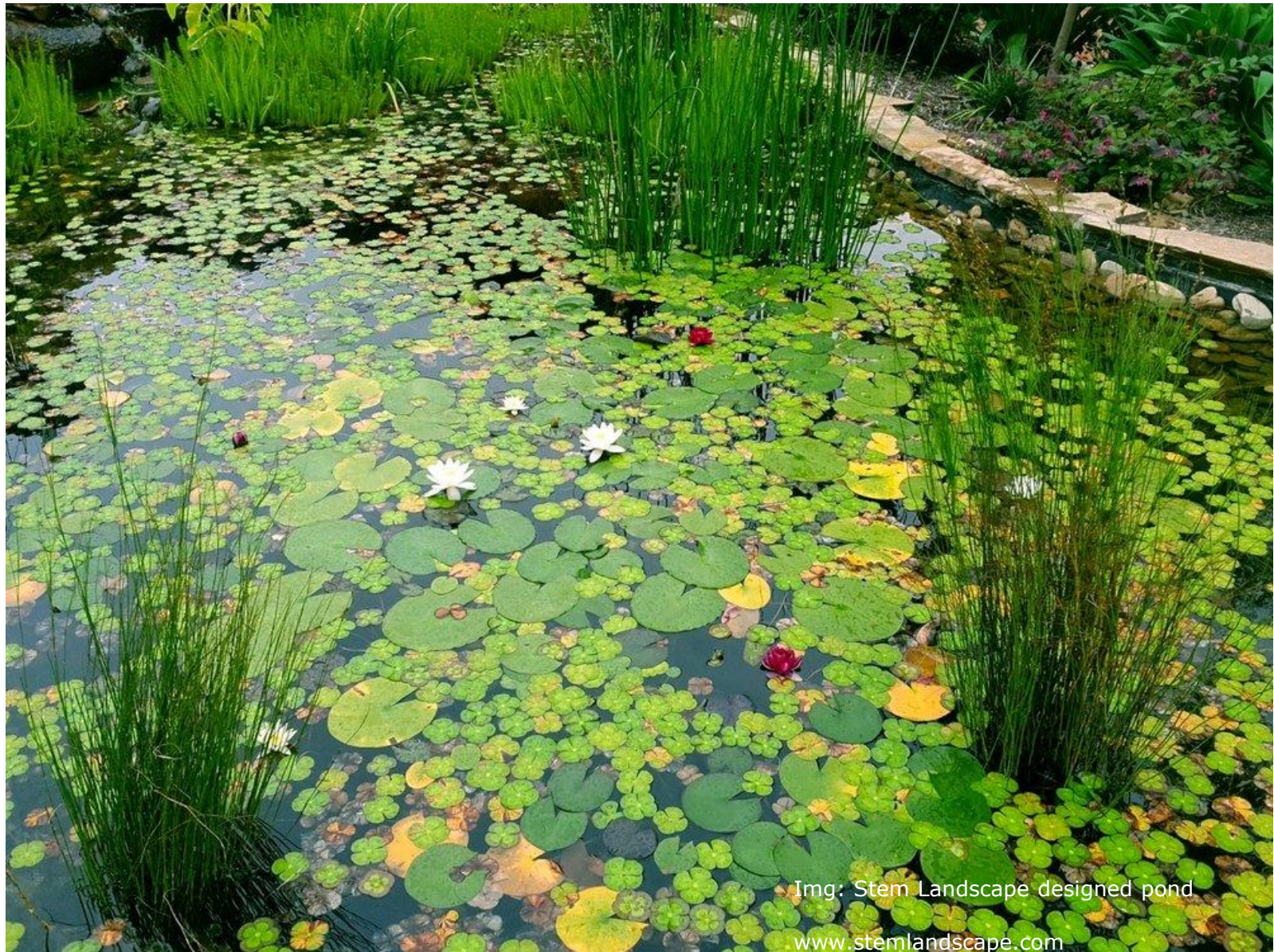
Frog ponds: some principles & elements



Frog ponds: some principles & elements



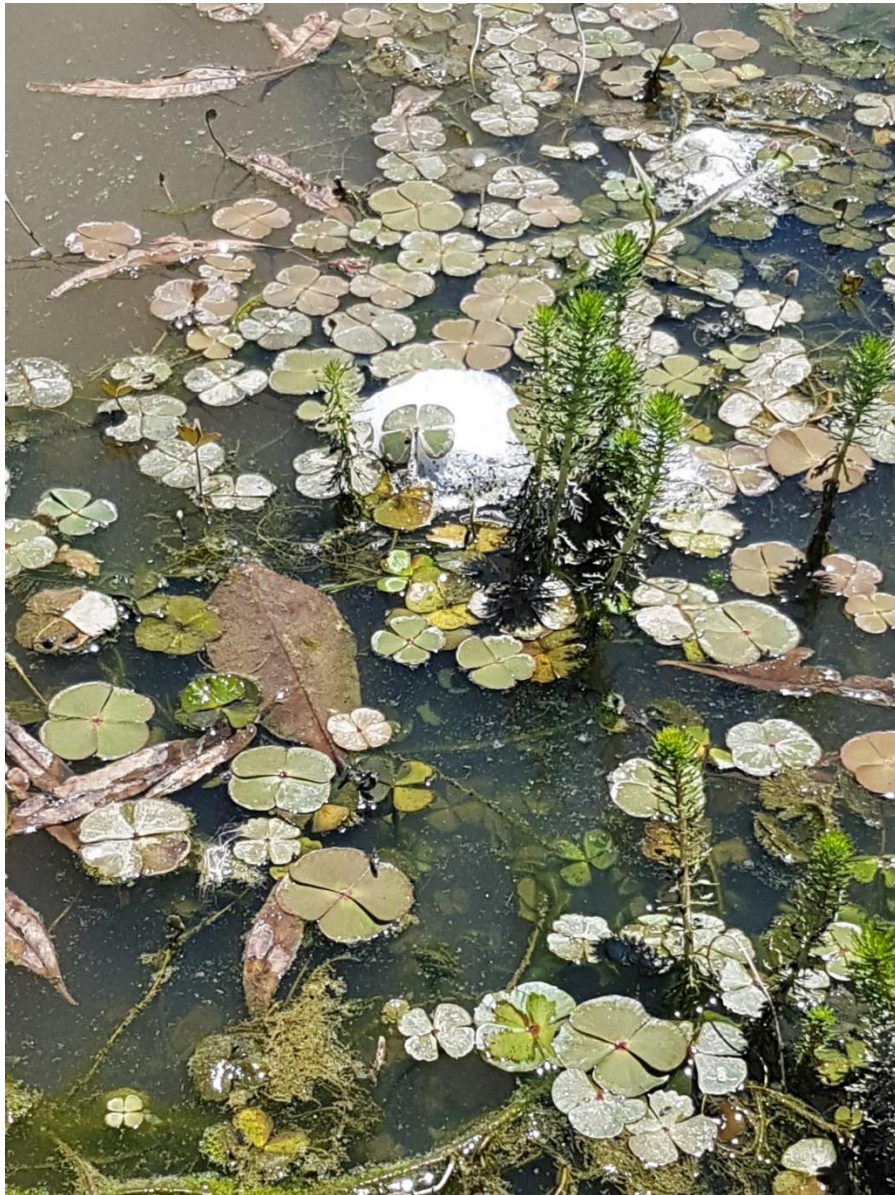
Frog Ponds: vegetation end goal



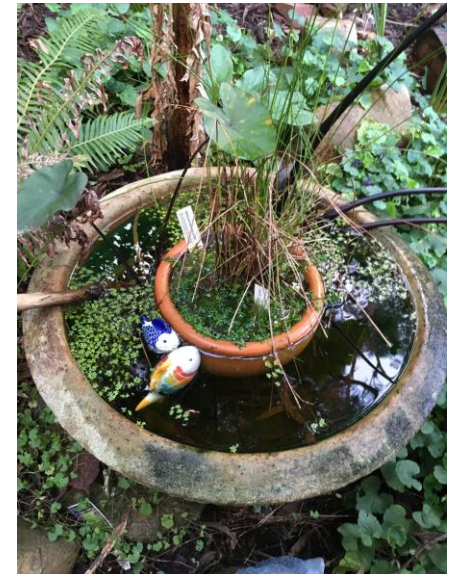
Img: Stem Landscape designed pond

www.stemlandscape.com

Frog Ponds: vegetation end goal



Frog pond types



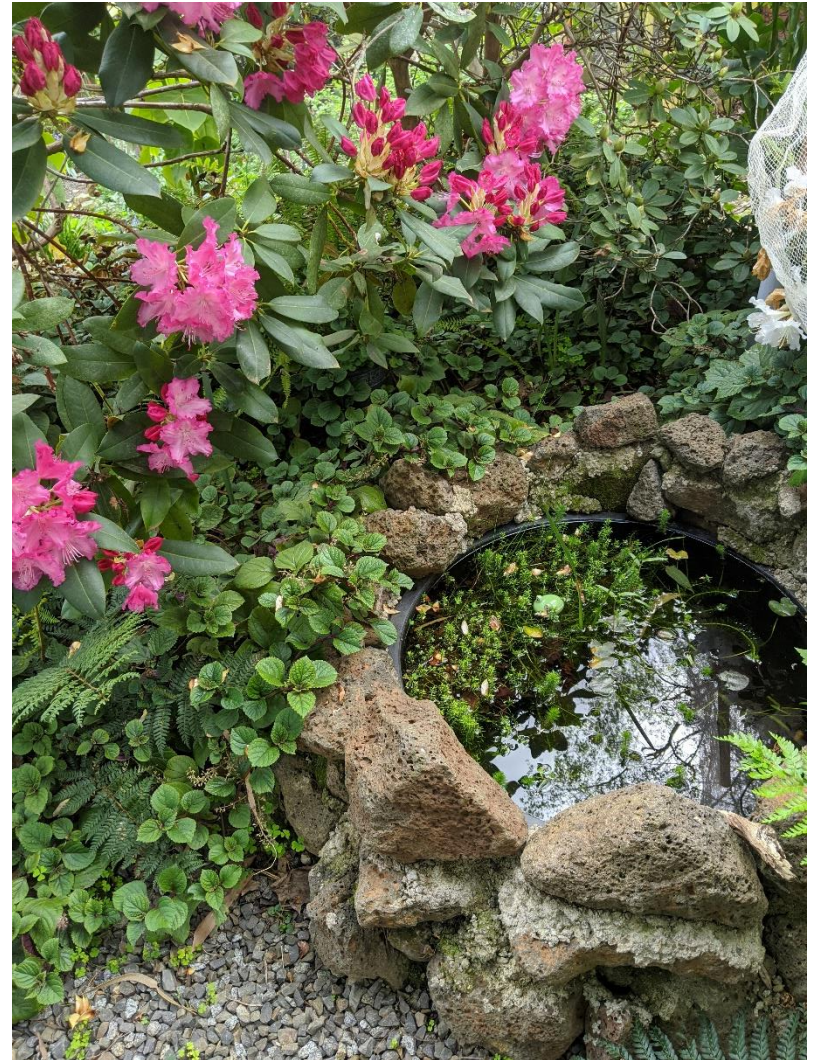
In-grounds ponds compacted clay liner



In-ground ponds with pond liners



Precast ponds



Pond in a pot



Ornamental



How to build a pond (using a liner)



Digging and lining



Abiotic elements



Vegetation zones and substrate



Introducing water



Trimming/finishing/landscaping



Wetland plants and planting



Vegetation structure end goals



Pre-cast pond construction



Pre-cast pond construction 2



Ponds and conflicting priorities: Yellingbo



The troubleshooting bit....



Troubleshooting

What about....

- Mosquitos
- Fish
- Birds – predators, ducks
- Algae
- Azolla, lemna etc
- Aquatic weeds
- Leaf fall
- Snakes
- Pond drying up
- Turbidity
- Eggs laid/tadpoles but not enough food



Maintenance

Things you might need to manage:

- Algae
- Azolla, lemna etc
- Leaf fall
- Desilting
- Rampant growth of aquatic plants
- Weeds
- Fountains & filters



How to monitor your pond and frogs



How to record and report frog calls

Key monitoring months



Visit at least 30 minutes after sunset



Wait 5 minutes after arrival for frogs to become accustomed



Always record for the same set timeframe each visit to ensure standardised data



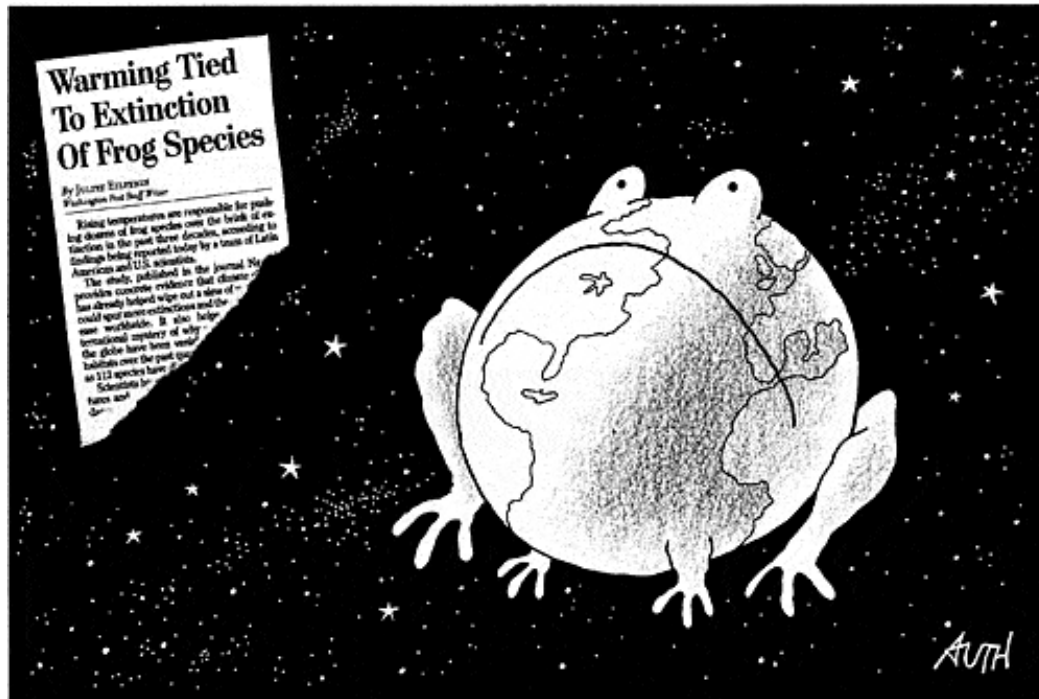
Do not visit sites at night alone. Tell others your movements



Clean boots / tyres between sites to avoid spreading disease



Hop to it and get creative!



1-13-06 The Associated Press. UNIVERSAL PRESS SYNDICATE.



Thankyou!

**Please contact Melbourne Water
for more information.**

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Frog Census Facebook Group:

<http://www.facebook.com/groups/MWFrogCensus>

Webpage:

<https://www.melbournewater.com.au/water-data-and-education/get-involved/be-citizen-scientist/frog-census>

