

Is Ecosystem Restoration Possible in NZ?

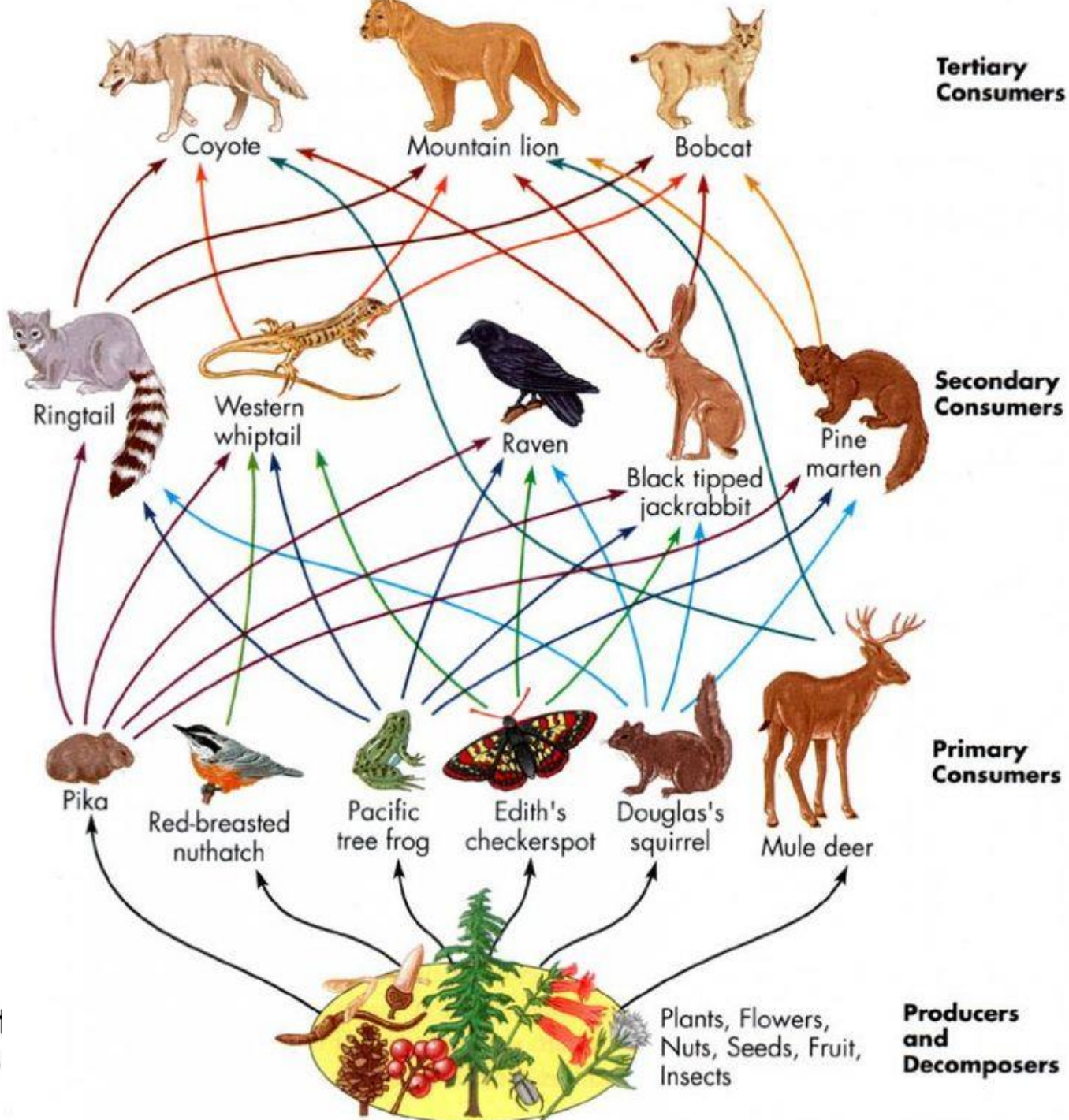
Paul Scofield

Thanks for images to



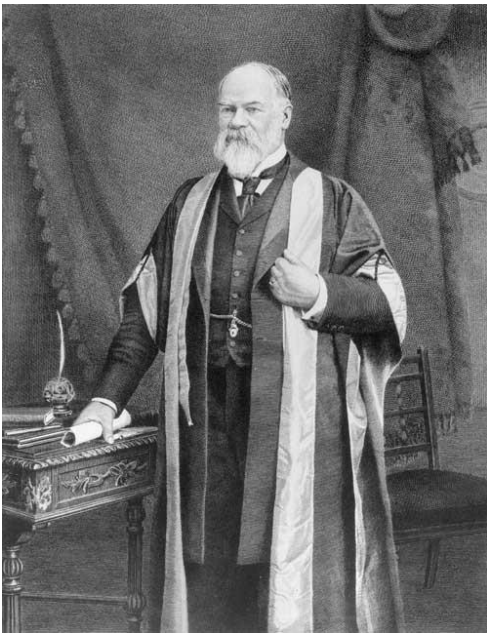






R.I.P

- Auckland Islands Shore Plover
- Bush Wren
- Chatham Bellbird
- Chatham Fernbird
- Chatham Islands Penguin
- Chatham Islands Rail
- Dieffenbach's Rail
- Hawkins's Rail
- Huia
- Laughing Owl
- Lyall's Wren
- New Zealand Little Bittern
- New Zealand Merganser
- Chatham Island Merganser
- New Zealand Quail
- North Island Piopio
- South Island Kokako
- North Island Snipe
- North Island Takahē
- South Island Piopio
- South Island Snipe
- Adzebill
- Little Bush Moa
- Chatham Islands Duck
- Chatham Raven
- Coastal Moa
- Crested Moa
- Eastern Moa
- Eyles's Harrier
- Finsch's Duck
- South Island Giant Moa
- North Island Giant Moa
- Haast's eagle
- Heavy-footed moa
- Hodgen's Rail
- Long-billed Wren
- North Island Goose
- South Island Goose
- New Zealand Raven
- New Zealand Musk Duck
- New Zealand Blue-billed Duck
- New Zealand Owlet-Nightjar
- New Zealand Swan
- Scarlett's Duck
- Scarlett's Shearwater
- Snipe-rail
- Stout-legged Wren
- Upland Moa
- Waitaha Penguin



‘Tuesday, 5 a.m. — At this moment the wooded valley of the Mangaone, in which we have been camped for the night, is ringing with delightful music. It is somewhat difficult to distinguish the performers amidst the general chorus of voices. The silvery notes of the Bellbird, the bolder notes of the Tui, the loud continuous strain of the native Robin, the joyous chirping of a flock of Whiteheads, **and the whistling cry of the Piopio** — all these voices of the forest are blended in wild harmony...For more than an hour after this concert had ceased, and the sylvan choristers had dispersed in search of their daily food, one species continued to enliven the valley with his musical notes. This bird was the Piopio, or New Zealand **Thrush...unquestionably the best of our native songsters.**”

***Turnagra*: The New Zealand Thrush**



“Invisible” invaders uncontrolled and whose effects are unknown

Pill Bugs (isopods) 2 NZ introduced species

population densities of up to 10,000 individuals per square metre



Earthworms

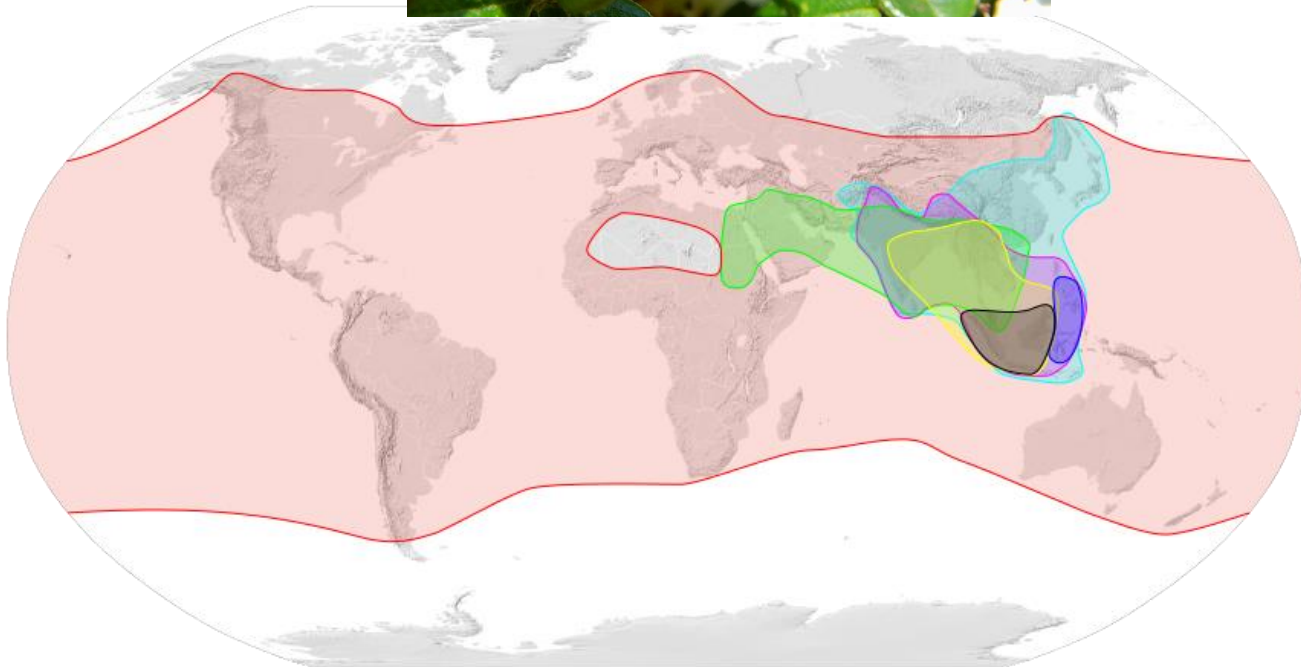
171 native and 23 non-native species. Introduced species are now most abundant and now are a significant food for Kiwi

Slugs and Snails

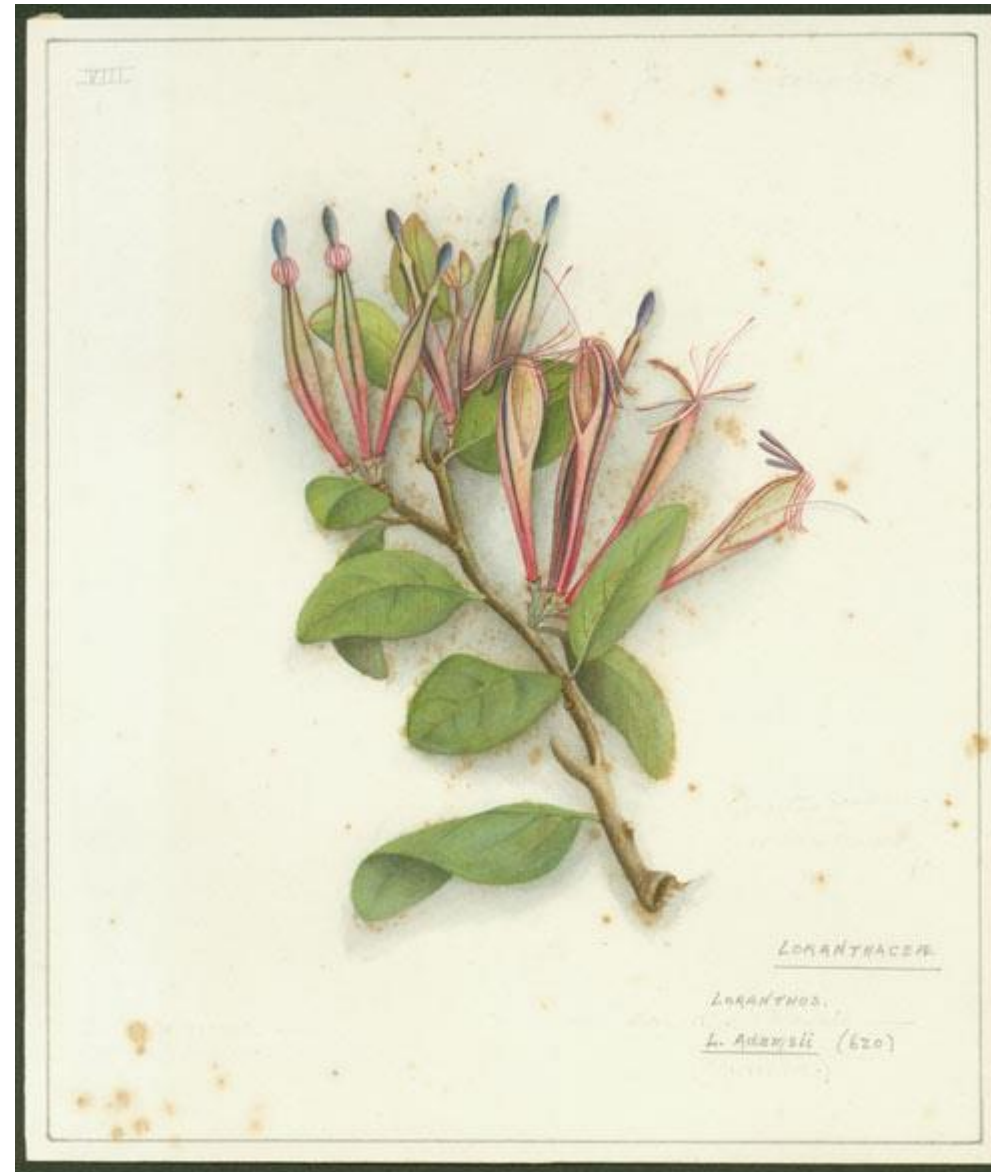
30 introduced species, representing 15 families



Honey Bees



Little Harbingers of Death?



So if ecosystem restoration is our goal what are the alternatives?

Rewilding and Ecological Substitution

Cassowary for Moa



Barking Owl for Laughing Owl



Figbird for Piopio



**Some of the substitution has
already happened!**

Black Swan for New Zealand Swan



Brown Quail for New Zealand Quail

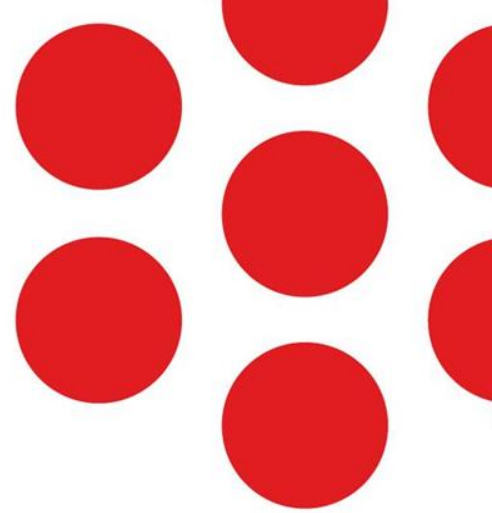


Magpie for New Zealand Raven



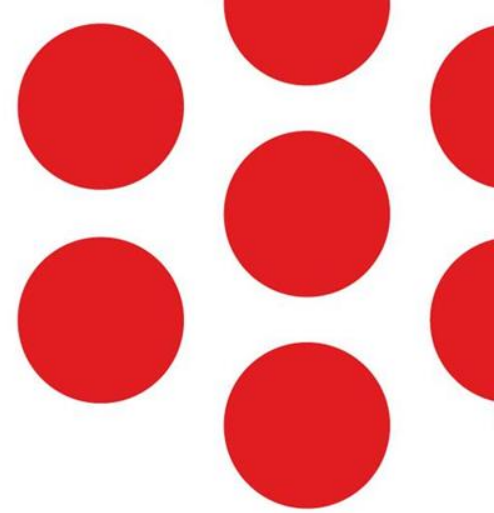
Swamp Harrier for Eyles' Harrier



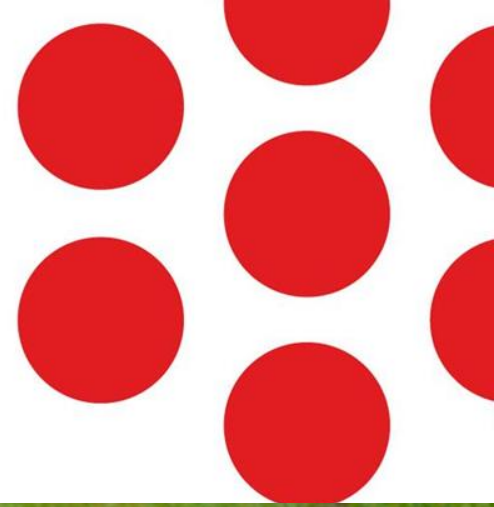
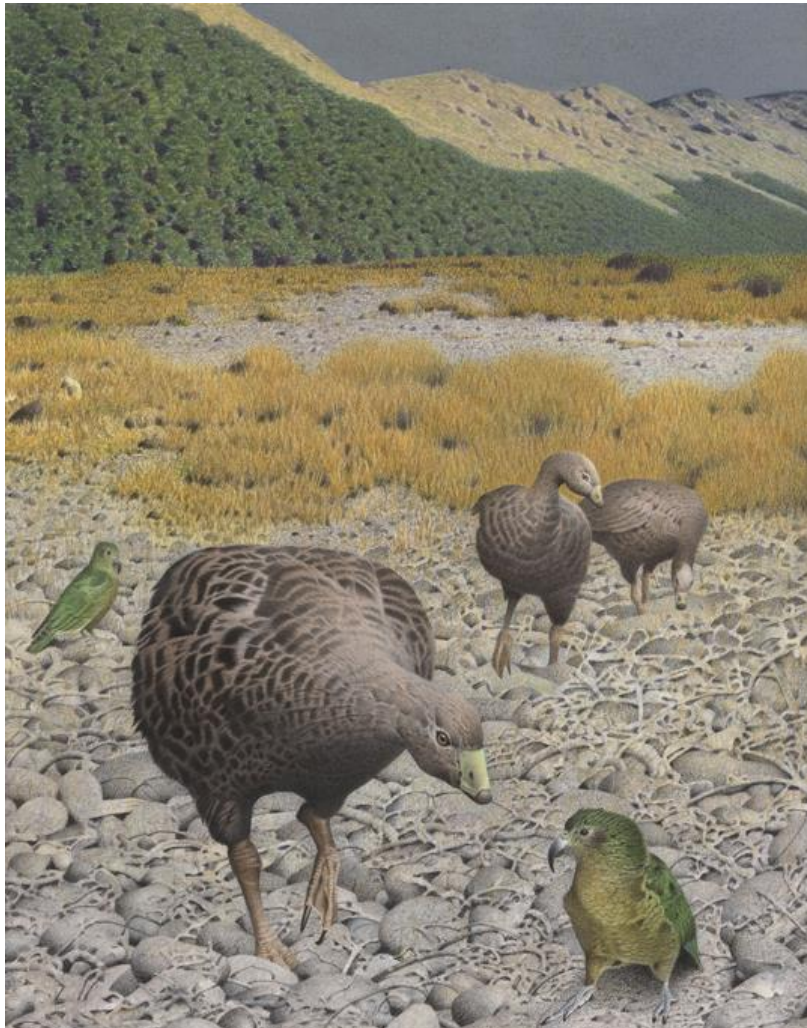


Some species are trying to “ecologically substitute” themselves

Maned Duck for Finsch's Duck



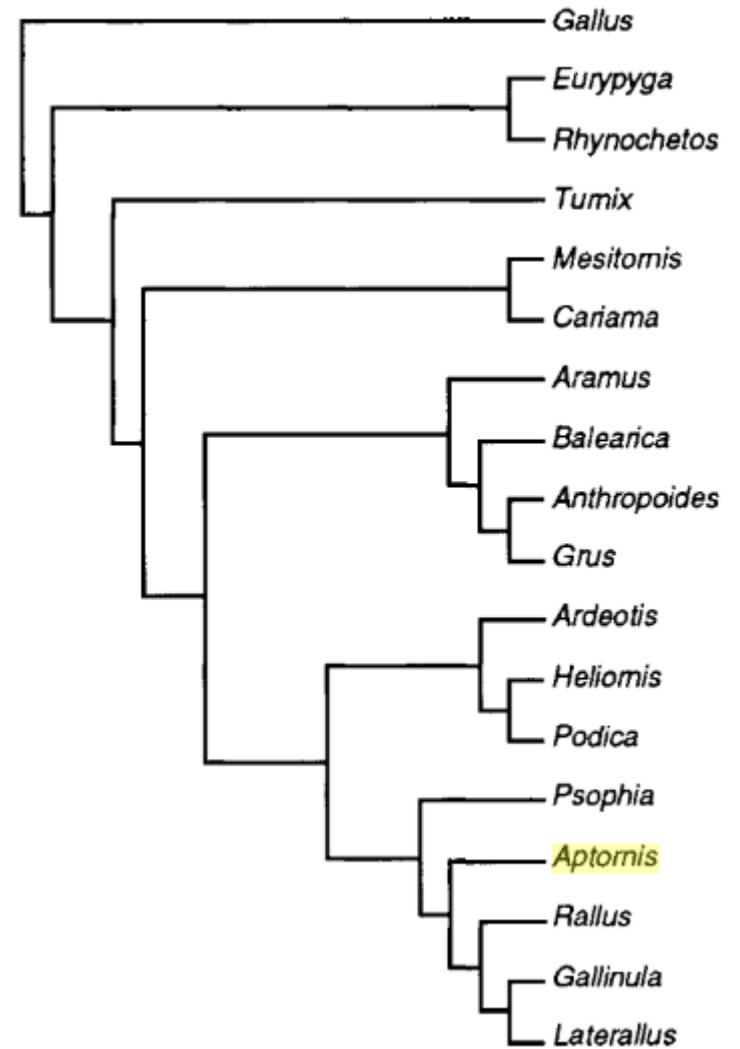
Cape Barren Goose for New Zealand Goose





But there are
“The Irreplaceable”

Adzebill



Haasts's Eagle

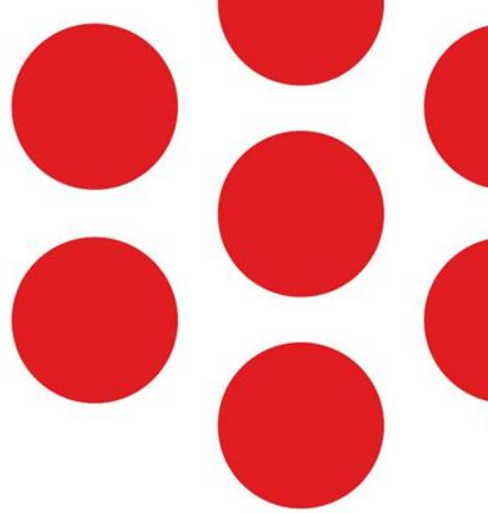




The lost Herps, invertebrates and plants

?

So what are the alternatives?



- **Rewilding** – its already happening why not embrace it?
- **Wide scale eradication of ecosystem invaders**

So what are the alternatives?

- Rewilding
- ~~Wide scale eradication~~
- Living with the consequences of our actions

