







Resource Book Links

This is a full listing of links included in the <u>2024 teacher resource book</u> *Species Survival: More than just sustainability* (17.5 MB, pdf).

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- Introduction
- Community Activities
- Species Game
- Foundation to Year 2
- Year 3 to Year 4
- Year 5 to Year 6
- Year 7 to Year 8
- Year 9 to Year 10

Introduction

- Midges pollinating cacao https://theconversation.com/tiny-cacao-flowers-and-fickle-midges-are-part-of-a-pollination-puzzle-that-limits-chocolate-production-154334
- Bee decline https://academic.oup.com/ae/article/64/3/134/5098349
- Monoculture crops https://ec.europa.eu/research-and-innovation/en/horizon-magazine/rise-and-fall-monoculture-farming
- Diverse crops https://extension.unr.edu/publication.aspx?PublD=3816
- Species diversity and clean water https://news.mongabay.com/2011/04/more-biodiversity-equals-cleaner-water-but-why/
- Species harmed by climate change https://www.environment.gov.au/cgi-bin/sprat/public/publicthreatenedlist.pl
- Additional deaths from climate change https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health
- Wildlife corridors https://www.dcceew.gov.au/environment/biodiversity/conservation/wildlife-corridors
- Living shorelines https://www.fisheries.noaa.gov/insight/understanding-living-shorelines
- Threatened species https://www.iucnredlist.org/
- Threatened Australian plants https://www.theguardian.com/environment/2023/oct/10/australia-doing-very-poorly-at-protecting-unique-plants-researchers-warn









- Countries with most endemic species https://www.kew.org/sites/default/files/2023-10/State%20of%20the%20World's%20Plants%20and%20Fungi%202023.pdf
- Extinct Australian land mammals https://soe.dcceew.gov.au/overview/environment/biodiversity
- Australia's national reserve system https://www.dcceew.gov.au/environment/land/nrs
- Sniffing out platypus burrows https://www.theguardian.com/australia-news/2022/feb/04/weve-never-seen-a-platypus-lay-an-egg-sniffer-dogs-to-aid-researchers-by-detecting-occupied-burrows
- Dropped off the threatened species list (1) https://www.theguardian.com/australia-news/2023/feb/23/conservation-efforts-celebrated-as-26-australian-species-no-longer-listed-as-threatened
- Dropped off the threatened species list
 (2) https://www.sciencedirect.com/science/article/pii/S0006320723000460?%23t0010
- 40,000 whales https://www.abc.net.au/news/2023-10-22/east-coast-humpback-whale-population-record-high-experts-say/102990590
- All's well with whales https://www.dcceew.gov.au/environment/marine/publications/humpback-whales-eastern-australia

Community Activities

- Atlas of Living Australia https://www.ala.org.au/
- Plantnet app (App Store) https://apps.apple.com/au/app/plantnet/id600547573
- Plantnet app (Google
 Play) https://play.google.com/store/apps/details?id=org.plantnet&hl=en&gl=US&pli=1
- iNaturalist app (App Store) https://apps.apple.com/au/app/inaturalist/id421397028
- iNaturalist app (Google Play) https://play.google.com/store/apps/details?id=org.inaturalist.android&hl=en&gl=US
- CSIRO Insect ID https://www.csiro.au/en/research/animals/insects/ID-Resources
- Field Guide Apps https://museumsvictoria.com.au/apps/national-field-guide-apps/
- Junior worm farm https://juniorlandcare.org.au/learning-activity/creating-a-worm-farm/
- Living sea walls https://www.livingseawalls.com.au/
- Build a possum box https://www.backyardbuddies.org.au/habitats/build-a-nest-box/
- Conservation Volunteers https://conservationvolunteers.com.au/

Species Game

Species Game on Scratch https://scratch.mit.edu/projects/920253589









Foundation to Year 2

- Threatened insect extinctions https://blog.csiro.au/scientists-fear-insect-populations-decline-ways-to-help/
- Bogong moths https://www.theguardian.com/environment/2019/feb/25/decline-in-bogong-moth-numbers-leaves-pygmy-mountain-possums-starving
- Sugarbee honey https://www.abc.net.au/news/2018-01-21/native-honeybees-provide-popular-bush-tucker/9333278
- Biodiversity and human <u>health https://cosmosmagazine.com/health/why-losing-australias-biodiversity-matters-for-human-health/</u>
- Bug hunt with Costa https://www.youtube.com/watch?v=i6vHTfdMCVs
- Peep Plants a Seed https://www.peepandthebigwideworld.com/en/kids/videos/35/peep-plants-a-seed/
- Tiny Tadpoles https://www.tinytap.com/activities/g3ayk/play/catching-tadpoles-more-or-less-counting
- Create a Scratch game https://www.youtube.com/watch?v=itru0SrXc0o

Year 3 - Year 4

- Australian extinctions https://www.wilderness.org.au/protecting-nature/biodiversity-and-extinction
- Habitat loss https://www.ipsos.com/sites/default/files/ct/publication/documents/2022-04/lpsos%20Climate%20Change%20Report%202022.pdf
- Bush Blitz TeachLive https://earthwatch.org.au/education/teacher-development/about-teachlive
- Citizen science findings https://www.csiro.au/en/news/all/news/2023/september/aussies-provide-more-than-62-million-species-records-for-conservation-research
- FrogID <u>https://australian.museum/get-involved/citizen-science/frogid/</u>
- Aussie Bird Count https://aussiebirdcount.org.au/
- ReefCloud https://reefcloud.ai/how-it-works
- 10 million observations https://theconversation.com/citizen-scientists-collect-more-nature-data-than-ever-showing-us-where-common-and-threatened-species-live-212372
- Australian Citizen Science Association https://citizenscience.org.au
- Living Planet Index https://www.livingplanetindex.org/about index
- Living Planet Report 2022 https://livingplanet.panda.org/
- Maths in Conservation https://www.natureconservancy.ca/en/blog/archive/it-all-adds-up-the.html
- Fishery and ocean diversity modelling https://science.uq.edu.au/article/2023/08/maths-model-improve-fisheries-and-ocean-biodiversity









- Citizen science projects https://science.uq.edu.au/article/2023/08/maths-model-improve-fisheries-and-ocean-biodiversity
- Identifying birds https://www.birdsinbackyards.net/finder
- Costa creating a bee hotel https://www.youtube.com/watch?v=OXkofBSOtOq
- Smart garden device https://www.digitaltechnologieshub.edu.au/search/dt-challenge-5-6-blockly-smart-garden/

Year 5 - Year 6

- Associate Professor Bradley
 Moggridge https://researchprofiles.canberra.edu.au/en/persons/brad-moggridge
- Aboriginal words https://www.indigenous.gov.au/news-and-media/announcements/iy2019-ancient-words-iconic-australian-animals
- Gurray app https://apps.apple.com/au/app/gurray/id1513495735
- Kamilaroi water scientist https://careerswithstem.com.au/profiles/kamilaroi-water-scientist/
- Fish traps https://www.mpra.com.au/brewarrina-fish-traps
- Cool burning https://www.youtube.com/watch?v=RM72NtXxyLs
- Watarrka Foundation https://www.watarrkafoundation.org.au/blog/aboriginal-fire-management-what-is-cool-burning
- Exploring Gayini https://www.natureaustralia.org.au/what-we-do/our-priorities/land-and-freshwater-stories/gayini/

Year 7 - Year 8

- Invasive Species Council https://invasives.org.au/our-work/feral-animals/
- Damage from cane toads https://www.bushheritage.org.au/what-we-do/landscape-management/ferals
- Ecological and agricultural damage https://www.bushheritage.org.au/what-we-do/landscape-management/ferals
- Tracking feral animals https://www.csiro.au/en/research/indigenous-science/managing-country/tracking
- Pig traps https://www.abc.net.au/news/rural/2020-07-16/feral-pig-trap-technology-linked-to-mobile-phone/12453226
- Breeding
 programs https://www.aph.gov.au/Parliamentary Business/Committees/Senate/Rural and R
 egional Affairs and Transport/Completed inquiries/Pre 1999/wild/report/c18
- Bilby breeding https://taronga.org.au/conservation-and-science/current-research/greater-bilby









- Scent based management https://taronga.org.au/conservation-and-science/current-research/scent-based-management
- One third of species are in botanic gardens https://www.bgci.org/news-events/worlds-botanic-gardens-contain-a-1-3-of-all-known-plant-species
- Royal Botanic Gardens Victoria https://www.rbg.vic.gov.au/science/research/
- Botanic Gardens of South Australia https://www.botanicgardens.sa.gov.au/science-conservation-centre
- Global seed bank https://en.wikipedia.org/wiki/Svalbard Global Seed Vault
- Camera trapping https://wwf.panda.org/discover/our-focus/wildlife-practice/camera-traps/
- Acoustic monitoring https://wwf.org.au/blogs/rewilding-the-platypus/
- Scalloped hammerheads https://theconversation.com/critically-endangered-scalloped-hammerheads-gather-in-seas-off-perth-they-need-protection-213258
- Western quolls https://www.australianwildlife.org/drone-tech-tracks-reintroduced-quolls-at-mt-gibson-wildlife-sanctuary/
- Al analysing infrared images https://cosmosmagazine.com/nature/mapping-australian-wildlife-with-the-help-of-drones-ai-and-citizen-scientists/
- FrogID https://www.frogid.net.au/science
- Tracking feral animals https://www.csiro.au/en/research/indigenous-science/managing-country/tracking
- Whale snot TedXMelbourne https://www.youtube.com/watch?v=2PXgFoTtwi0
- Vanessa Pirrota's work https://iview.abc.net.au/video/DC2103H004S00
- Beluga hematology and serum values https://meridian.allenpress.com/jwd/article/24/2/220/117865/HEMATOLOGY-AND-SERUM-CHEMISTRY-VALUES-IN-THE
- Random numbers video https://www.youtube.com/watch?v=mQ-Vit075pY
- Random numbers tutorial https://github.com/veryacademy/Python-Beginner-PY001/blob/main/006 Random.md
- Python tutorial https://www.digitaltechnologieshub.edu.au/search/tutorial-python/

Year 9 - Year 10

- 8.7 million species https://www.nature.com/articles/news.2011.498
- Fruit fly genes https://biology.ucdavis.edu/research/model-organisms/fruit-fly
- Thylacine genome https://pursuit.unimelb.edu.au/articles/piecing-thylacine-dna-back-together
- Numbat genome https://theconversation.com/weve-decoded-the-numbat-genome-and-it-could-bring-the-thylacines-resurrection-a-step-closer-176528











- Genetic diversity https://www.npr.org/sections/thetwo-way/2017/12/12/570096984/lack-of-genetic-diversity-may-have-doomed-tasmanian-tiger-scientists-say
- Eastern barred bandicoot breeding https://www.zoo.org.au/fighting-extinction/local-threatened-species/eastern-barred-bandicoot-mainland-population/
- Eastern barred bandicoot success https://www.smithsonianmag.com/science-nature/how-australias-eastern-barred-bandicoot-came-back-from-extinction-180978958/
- Shared genes https://education.nationalgeographic.org/resource/genes-are-us-and-them/
- DNA spells evolution https://www.khanacademy.org/science/ap-biology/natural-selection/population-genetics/v/dna-spells-evolution
- DNA extraction https://www.scienceweek.net.au/diy-science-dna-extraction/