# **1. Refereed publications using NVS data 2016-2021**

Adhikari S, Burke IC, Eigenbrode SD 2020. Mayweed chamomile (Anthemis cotula L.) biology and management: a review of an emerging global invader. Weed Research. https://doi.org/10.1111/wre.12426. [Data sourced from GBIF].

Affeld K, Wiser SK, Payton I, DeCáceres M 2018. Using classification assignment rules to assess land-use change impacts on forest biodiversity at local to national scales. [Forest Ecosystems 5: 13.](https://doi.org/10.1186/s40663-017-0121-z)

Aguilar GD, Blanchon DJ, Foote H, Pollonais CW, Mosee AN 2017. A performance based consensus approach for predicting spatial extent of the Chinese windmill palm (*Trachycarpus fortunei*) in New Zealand under climate change. [Ecological Informatics 39: 130–9.](https://doi.org/10.1016/j.ecoinf.2017.04.004)

Allen R, MacKenzie D, Bellingham P, Wiser S, Arnst E, Coomes D, Hurst J 2020. Tree survival and growth responses in the aftermath of a strong earthquake. Journal of Ecology 108: 107–122. DOI: 10.1111/1365-2745.13238.

Allen R, Tahi B 2016. Tawa timber – an updated perspective on opportunities and issues. Indigena: 9–11.

Antonelli A, Hettling H, Condamine FL, Vos K, Nilsson RH, Sanderson MJ, Sauquet H, Scharn R, Silvestro D, Töpel M and others 2016. Toward a self-updating platform for estimating rates of speciation and migration, ages, and relationships of taxa. [Systematic Biology 66(2): 152-166](https://doi.org/10.1093/sysbio/syw066) [Data sourced from GBIF].

Ausseil AG, Dymond JR, Newstrom L 2018. Mapping floral resources for honey bees in New Zealand at the catchment scale. [Ecological Applications 28: 1182–1196.](https://doi.org/10.1002/eap.1717)

Bacon CD, Velásquez-Puentes FJ, Hinojosa LF, Schwartz T, Oxelman B, Pfeil B, Arroyo MT, Wanntorp L, Antonelli A. 2018. Evolutionary persistence in *Gunnera* and the contribution of southern plant groups to the tropical Andes biodiversity hotspot. [PeerJ. 16;6:e4388](https://doi.org/10.7717/peerj.4388) [Data sourced from GBIF].

Bellingham PJ, Richardson SJ, Gormley AM, Allen RB, Cook A, Crisp PN et al. 2020. Implementing integrated measurements of Essential Biodiversity Variables at a national scale. Ecological Solutions and Evidence 1(2): e12025. doi: <https://doi.org/10.1002/2688-8319.12025>.

Bellingham PJ, Richardson SJ, Mason NWH, Veltman C, Allen RB, Allen WJ, Barker RJ, Forsyth DM, Nicol SJ, Ramsey DSL 2016. Introduced deer at low densities do not inhibit the regeneration of a dominant tree. [Forest Ecology and Management 364: 70–76.](https://doi.org/10.1016/j.foreco.2015.12.013)

Bernard‐Verdier M, Hulme PE. 2019. Alien plants can be associated with a decrease in local and regional native richness even when at low abundance. [Journal of Ecology 107: 1343-54.](https://doi.org/10.1111/1365-2745.13124)

Bokhorst S, Kardol P, Bellingham PJ, Kooyman RM, Richardson SJ, Schmidt S, Wardle DA 2017. Responses of communities of soil organisms and plants to soil aging at two contrasting long-term chronosequences. [Soil Biology and Biochemistry 106: 69–79.](https://doi.org/10.1016/j.soilbio.2016.12.014)

Bombaci S, Pejchar L, Innes J. 2018. Fenced sanctuaries deliver conservation benefits for most common and threatened native island birds in New Zealand. [Ecosphere 9(11): e02497.](https://doi.org/10.1002/ecs2.2497)

Bond MO, Anderson BJ, Henare THA, Wehi PM 2019. Effects of climatically shifting species distributions on biocultural relationships. People and Nature 1: 87– 102. https://doi.org/10.1002/pan3.15.

Boucher FC, Lavergne S, Basile M, Choler P, Aubert S 2016. Evolution and biogeography of the cushion life form in angiosperms. [Perspectives in Plant Ecology, Evolution and Systematics 20: 22–31](https://doi.org/10.1016/j.ppees.2016.03.002) [Data accessed via GBIF].

Brandt AJ, Bellingham PJ, Duncan RP, Etherington TR, Fridley JD, Howell CJ, et al. 2021. Naturalised plants transform the composition and function of the New Zealand flora. Biological Invasions 23(2): 351–366. doi:10.1007/s10530-020-02393-4.

Brandt AJ, Tanentzap AJ, Leopold DR, Heenan PB, Fukami T, Lee WG 2016. Precipitation alters the strength of evolutionary priority effects in forest community assembly of pteridophytes and angiosperms. [Journal of Ecology 104(6): 1673–81.](https://doi.org/10.1111/1365-2745.12640)

Brock JM, Perry GL, Lee WG, Burns BR 2016. Tree fern ecology in New Zealand: A model for southern temperate rainforests. [Forest Ecology and Management 375: 112–126](https://doi.org/10.1016/j.foreco.2016.05.030) [Sourced from GBIF].

Brock JM, Perry GL, Lee WG, Schwendenmann L, Burns BR. 2018. Pioneer tree ferns influence community assembly in northern New Zealand forests. [New Zealand Journal of Ecology. 42(1):18-30.](https://www.jstor.org/stable/26538092)

Bruelheide H, Dengler J, Jiménez‐Alfaro B, Purschke O, Hennekens SM, Chytrý M, Pillar VD, Jansen F, Kattge J, Sandel B, Aubin I….Wiser SK…Arnst E… 2019. sPlot–A new tool for global vegetation analyses. [Journal of Vegetation Science. 30(2): 161-86.](https://doi.org/10.1111/jvs.12710)

Bruelheide H, Dengler J, Purschke O, Lenoir J, Jiménez-Alfaro B, Hennekens SM…..Orwin K…..2018. Global trait–environment relationships of plant communities. [Nature Ecology and Evolution 2: 1906-1917.](https://doi.org/10.1038/s41559-018-0699-8)

Brummer TJ, Byrom AE, Sullivan JJ, Hulme PE. 2016. Alien and native plant richness and abundance respond to different environmental drivers across multiple gravel floodplain ecosystems. [Diversity and Distributions 22 (7): 823–835.](https://doi.org/10.1111/ddi.12448)

Burge OR, Bellingham PJ, Arnst EA, Bonner KI, Burrows LE, Richardson SJ, et al. 2020. Integrating permanent plot and palaeoecological data to determine subalpine post-fire succession, recovery and convergence over 128 years. Journal of Vegetation Science 31(5): 755–767.

Carey MP, Sethi SA, Larsen SJ, Rich CF 2016. A primer on potential impacts, management priorities, and future directions for *Elodea* spp. in high latitude systems: learning from the Alaskan experience. [Hydrobiologia 777: 1–19](https://link.springer.com/article/10.1007/s10750-016-2767-x) [Data accessed via GBIF].

Carpenter JK, Walker S, Monks A, Innes J, Binny RN, Schlesselmann A-KB 2021. Factors limiting kererū (Hemiphaga novaeseelandiae) populations across New Zealand. New Zealand Journal of Ecology 45(2). doi:10.20421/nzjecol.45.30.

Chevalier M 2019. Enabling possibilities to quantify past climate from fossil assemblages at a global scale. [Global and Planetary Change 175: 27-35](https://doi.org/10.1016/j.gloplacha.2019.01.016) [Data sourced from GBIF].

Chidawanyika F, Chikowore G, Mutamiswa R 2020. Thermal tolerance of the biological control agent Neolema abbreviata and its potential geographic distribution together with its host Tradescantia fluminensis in South Africa. Biological Control 104315. doi:10.1016/j.biocontrol.2020.104315.

Clarke AG, Lord JM, Hua X, Ohlemüller R 2018. Does current climate explain plant disjunctions? A test using the New Zealand alpine flora. [Journal of Biogeography. 45(7): 1490–1499](https://doi.org/10.1111/jbi.13222) [Data sourced from GBIF].

Cohen JE, Lai J, Coomes DA, Allen RB 2016. Taylor's law and related allometric power laws in New Zealand mountain beech forests: the roles of space, time, and environment. [Oikos 125: 1342–1357.](https://doi.org/10.1111/oik.02622)

Conradi T, Slingsby JA, Midgley GF, Nottebrock H, Schweiger AH, Higgins SI 2020. An operational definition of the biome for global change research. New Phytologist. https://doi.org/10.1111/nph.16580 [Data sourced from GBIF].

Coomes DA, Šafka D, Shepherd J, Dalponte M, Holdaway R 2018. Airborne laser scanning of natural forests in New Zealand reveals the influences of wind on forest carbon. [Forest Ecosystems 5(1): 10.](https://link.springer.com/article/10.1186/s40663-017-0119-6)

Cornwell WK, Pearse WD, Dalrymple RL, Zanne AE 2019. What we (don't) know about global plant diversity. Ecography 42(11): 1819-1831. [Data sourced from GBIF].

Cruz J, Thomson C, Parkes JP, Gruner I, Forsyth DM 2017. Long-term impacts of an introduced ungulate in native grasslands: Himalayan tahr (*Hemitragus jemlahicus*) in New Zealand’s Southern Alps. [Biological Invasions 19(1): 339–349.](https://doi.org/10.1007/s10530-016-1283-2)

DeCáceres M, Coll L, Legendre P, Allen RB, Wiser SK, Condit R, Hubbell S 2018. Trajectory analysis in community ecology. [Ecological Monographs 89(2): e01350.](https://doi.org/10.1002/ecm.1350)

Department of Conservation 2019. New Zealand’s Sixth National Report to the United Nations Convention on Biological Diversity. Reporting period: 2014–2018. [Department of Conservation, Wellington. New Zealand.](https://www.cbd.int/doc/nr/nr-06/nz-nr-06-en.pdf)

Dickie IA, Boyer S, Buckley H, Duncan RP, Gardner P, Hogg ID, Holdaway RJ, Lear G, Makiola A, Morales SE, Powell JR 2018. Towards robust and repeatable sampling methods in eDNA based studies. [Molecular Ecology Resources 18(5): 940–952.](https://doi.org/10.1111/1755-0998.12907)

Dickie IA, Wakelin AM, Martínez-García LB, Richardson SJ, Makiola A, Tylianakis JM 2019. Oomycetes along a 120,000-year temperate rainforest ecosystem development chronosequence. [Fungal Ecology 39: 192-200.](https://doi.org/10.1016/j.funeco.2019.02.007)

Dobson-Waitere A, MacIntosh R, Ellison MF, Smallfield BM, van Klink JW 2021. Taramea, a treasured Māori perfume of Ngāi Tahu from Aciphylla species of Aotearoa New Zealand: a review of Mātauranga Māori and scientific research. Journal of the Royal Society of New Zealand, in press. doi:10.1080/03036758.2020.1856147.

Donovan GH, Gatziolis D, Mannetje A, Weinkove R, Fyfe C, Douwes J 2021. An empirical test of the biodiversity hypothesis: exposure to plant diversity is associated with a reduced risk of childhood acute lymphoblastic leukemia. Science of the Total Environment 768: 144627. doi:https://doi.org/10.1016/j.scitotenv.2020.144627.

Dymond JR, Zörner J, Shepherd JD, Wiser SK, Pairman D, Sabetizade M 2019. Mapping physiognomic types of indigenous forest in New Zealand using space-borne SAR, optical imagery and air-borne LiDAR. Remote Sensing 11: 1911. DOI: 10.3390/rs11161911.

Easdale TA, Richardson SJ, Marden M, England JR, Gayoso-Aguilar J, Guerra-Cárcamo JE, McCarthy JK, Paul KI, Schwendenmann L, Brandon AM 2019. Root biomass allocation in southern temperate forests. Forest Ecology and Management 453: 117542.

Elith J, Graham C, Valavi R, Abegg M, Bruce C, Ford A, et al. 2020. Presence-only and presence-absence data for comparing species distribution modeling methods. Biodiversity Informatics 15(2): 69–80. doi:10.17161/bi.v15i2.13384.

Enquist BJ, Feng X, Boyle B, Maitner B, Newman EA, Jørgensen PM, Roehrdanz PR, Thiers BM, Burger JR, Corlett RT, et al. 2019. The commonness of rarity: global and future distribution of rarity across land plants. Science Advances 1;5(11): eaaz0414. [Data sourced from GBIF].

Fernandez RD, Ceballos SJ, Aragón R, Malizia A, Montti L, Whitworth-Hulse JI, et al. 2020. A global review of Ligustrum lucidum (Oleaceae) invasion. The Botanical Review 86(2): 93–118. doi:10.1007/s12229-020-09228-w.

Folk RA, Stubbs RL, Mort ME, Cellinese N, Allen JM, Soltis PS, Soltis DE, Guralnick RP 2019. Rates of niche and phenotype evolution lag behind diversification in a temperate radiation. [Proceedings of the National Academy of Sciences 116(22): 10874-10882](https://doi.org/10.1073/pnas.1817999116) [Data sourced from GBIF].

Forsyth DM, Allen RB, Allen RKJ, Affeld K, MacKenzie DI 2016. Soil phosphorus predicts feral pig (*Sus scrofa*) occupancy, detection probability and feeding activity in a temperate montane rainforest. [Wildlife Research 43(4): 277–287.](https://doi.org/10.1071/WR16030)

Franklin J, Serra-Diaz JM, Syphard AD, Regan HM 2017. Big data for forecasting the impacts of global change on plant communities. [Global Ecology and Biogeography 26(1): 6-17](https://doi.org/10.1111/geb.12501) [Data sourced from GBIF].

Gallien L, Saladin B, Boucher FC, Richardson DM, Zimmermann NE 2016. Does the legacy of historical biogeography shape current invasiveness in pines? [New Phytologist 209: 1096–1105](https://doi.org/10.1111/nph.13700) [Sourced from GBIF].

Gamisch A, Comes HP 2019. Clade-age-dependent diversification under high species turnover shapes species richness disparities among tropical rainforest lineages of *Bulbophyllum* (Orchidaceae). [BMC Evolutionary Biology 19(1): 93](https://doi.org/10.1186/s12862-019-1416-1) [Data sourced from GBIF].

Garrett LG, Kimberley MO, Oliver GR, Parks M, Pearce SH, Beets PN, Paul TS. 2019. Decay rates of above-and below-ground coarse woody debris of common tree species in New Zealand’s natural forest. [Forest Ecology and Management 438: 96-102.](https://doi.org/10.1016/j.foreco.2018.12.013)

Garrity FD, Lusk CH 2017. Independent contrasts reveal climatic relationships of divaricate plants in New Zealand. [New Zealand Journal of Botany 10: 1–6.](https://doi.org/10.1080/0028825X.2017.1293695)

Gillard M, Thiébaut G, Deleu C, Leroy B 2017. Present and future distribution of three aquatic plant taxa across the world: decrease in native and increase in invasive ranges. [Biological Invasions 19(7): 2159–70](https://doi.org/10.1007/s10530-017-1428-y) [Data accessed via GBIF].

Glick HB, Bettigole C, Maynard DS, Covey KR, Smith JR, Crowther TW 2016. Spatially-explicit models of global tree density. [Scientific Data 3: 160069.](https://doi.org/10.1038/sdata.2016.69)

Gray LJ, Renner MA 2016. Botany, GIS and archives combine to assess the provenance of historical Kakapo study-skins stuffed with New Zealand bryophytes. [Emu 116(4): 452–60.](https://doi.org/10.1071/MU16017)

Grossenbacher DL, Brandvain Y, Auld JR, Burd M, Cheptou PO, Conner JK, Grant AG, Hovick SM, Pannell JR, Pauw A, Petanidou T 2017. Self‐compatibility is over‐represented on islands. [New Phytologist 215: 469–478](https://doi.org/10.1111/nph.14534) [Data accessed via GBIF].

Hannah L, Aguilar G, Blanchon D. 2019. Spatial distribution of the Mexican daisy, *Erigeron karvinskianus*, in New Zealand under climate change. [Climate 7(2): 24](https://doi.org/10.3390/cli7020024) [Data sourced from GBIF].

Harris RMB, Kriticos DJ, Remenyi T, Bindoff N 2017. Unusual suspects in the usual places: a phylo-climatic framework to identify potential future invasive species. [Biological Invasions 19: 577–96](https://doi.org/10.1007/s10530-016-1334-8) [Data accessed via GBIF].

He X, Burgess KS, Yang X-F, Ahrends A, Gao L-M, Li D-Z 2019. Upward elevation and northwest range shifts for alpine *Meconopsis* species in the Himalaya–Hengduan Mountains region. [Ecology and Evolution 9(7): 4055-4064](https://doi.org/10.1002/ece3.5034) [Data sourced from GBIF].

Hock M, Hofmann R, Essl F, Pyšek P, Bruelheide H, Erfmeier A 2020. Native distribution characteristics rather than functional traits explain preadaptation of invasive species to high‐UV‐B environments. Diversity and Distributions 26: 1421-1438. DOI:10.1111/ddi.13113 [Data sourced from GBIF].

Holdaway RJ, Easdale TA, Carswell FE, Richardson SJ, Peltzer DA, Mason NW, Brandon AM, Coomes DA 2016. Nationally representative plot network reveals contrasting drivers of net biomass change in secondary and old-growth forests. [Ecosystems: 1–6.](https://doi.org/10.1007/s10021-016-0084-x)

Holdaway RJ, Wood JR, Dickie IA, Orwin KH, Bellingham PJ, Richardson SJ, Lyver PO, Timoti P, Buckley TR 2017. Using DNA metabarcoding to assess New Zealand’s terrestrial biodiversity. [New Zealand Journal of Ecology 41: 251–262.](https://www.jstor.org/stable/26198807)

Howell CJ, Terry JA 2016. The creation of a New Zealand weed atlas. [Science for Conservation 328.](https://dcon01mstr0c21wprod.azurewebsites.net/globalassets/documents/science-and-technical/sfc328entire.pdf) Department of Conservation, Wellington, New Zealand. 21 p.

Jahanshiri E, Mohd Nizar NM, Tengku Mohd Suhairi TAS, Gregory PJ, Mohamed AS, Wimalasiri EM, Azam-Ali SN 2020. A land evaluation framework for agricultural diversification. Sustainability 12(8): 3110. [Data sourced from GBIF].

Karger DN, Kessler M, Conrad O, Weigelt P, Kreft H, König C, Zimmermann NE 2019. Why tree lines are lower on islands—Climatic and biogeographic effects hold the answer. [Global Ecology and Biogeography 28(6): 839-850](https://doi.org/10.1111/geb.12897) [Data sourced from GBIF].

Kattenborn T, Eichel J, Wiser S, Burrows L, Fassnacht F, Schmidtlein S 2020. Convolutional neural networks accurately predict cover fractions of plant species and communities in unmanned aerial vehicle imagery. Remote Sensing in Ecology and Conservation (early view 5 February 2020). <https://doi.org/10.1002/rse2.146>.

Keppel G, Craven D, Weigelt P, Smith SA, van der Sande MT, Sandel B, et al. 2021. Synthesizing tree biodiversity data to understand global patterns and processes of vegetation. Journal of Vegetation Science 32(3): e13021. doi:10.1111/jvs.13021

Khoury CK, Amariles D, Soto JS, Diaz MV, Sotelo S, Sosa CC, Ramírez-Villegas J, Achicanoy HA, Castañeda-Álvarez NP, León B and others 2019. Data for the calculation of an indicator of the comprehensiveness of conservation of useful wild plants. [Data in Brief 22: 90-97](https://doi.org/10.1016/j.dib.2018.11.125) [Data sourced from GBIF].

Khoury CK, Amariles D, Soto JS, Diaz MV, Sotelo S, Sosa CC, Ramírez-Villegas J, Achicanoy HA, Velásquez-Tibatá J, Guarino L and others 2019. Comprehensiveness of conservation of useful wild plants: An operational indicator for biodiversity and sustainable development targets. [Ecological Indicators 98: 420-429](https://doi.org/10.1016/j.ecolind.2018.11.016) [Data sourced from GBIF].

Klages JP, Salzmann U, Bickert T, Hillenbrand C-D, Gohl K, Kuhn G, Bohaty SM, Titschack J, Müller J, Frederichs T 2020. Temperate rainforests near the South Pole during peak Cretaceous warmth. Nature 580(7801): 81–86. [Data sourced from GBIF].

Kramer-Walter KR, Bellingham PJ, Millar TR, Smissen RD, Richardson SJ, Laughlin DC 2016. Root traits are multidimensional: specific root length is independent from root tissue density and the plant economic spectrum. [Journal of Ecology 104: 1299–1310.](https://doi.org/10.1111/1365-2745.12562)

Kunstler G, Falster D, Coomes DA, Hui F, Kooyman RM, Laughlin DC, (17 others), Richardson SJ et al. (12 others) 2016. Plant functional traits have globally consistent effects on competition. [Nature 529: 204–207.](https://doi.org/doi%3A10.1038/nature16476)

Larcombe MJ, Jordan GJ, Bryant D, Higgins SI 2018. The dimensionality of niche space allows bounded and unbounded processes to jointly influence diversification. [Nature Communications 9: 1–9](https://doi.org/10.1038/s41467-018-06732-x) [Data sourced from GBIF].

Laughlin DC, Delzon S, Clearwater MJ, Bellingham PJ, McGlone MS, Richardson SJ 2020. Climatic limits of temperate rainforest tree species are explained by xylem embolism resistance among angiosperms but not among conifers. New Phytologist 226: 727– 740.

Laughlin DC, Lusk CH, Bellingham PJ, Burslem DF, Simpson AH, Kramer-Walter KR 2017. Intraspecific trait variation can weaken interspecific trait correlations when assessing the whole-plant economic spectrum. [Ecology and Evolution 7: 8936–8949.](https://doi.org/10.1002/ece3.3447)

Liang J, Crowther TW, Picard N, Wiser S, Zhou M, Alberti G, Schulze ED, McGuire AD, Bozzato F, Pretzsch H, de-Miguel S et al. 2016. Positive biodiversity-productivity relationship predominant in global forests. [Science 354(6309): aaf8957.](http://www.doi.org/10.1126/science.aaf8957)

Li K, Wang J, Qiao L, Zheng R, Ma Y, Chen Y, Hou X, Du Y, Gao J, Liu H 2020. Diversity of reproductive phenology among subtropical grasses is constrained by evolution and climatic niche. Frontiers in Ecology and Evolution 8: 181. [Data sourced from GBIF].

Lindberg CL, Hanslin HM, Schubert M, Marcussen T, Trevaskis B, Preston JC, Fjellheim S. 2020. Increased above ground resource allocation is a likely precursor for independent evolutionary origins of annuality in the Pooideae grass subfamily. New Phytologist 228: 318-329. [Data sourced from GBIF].

Lusk CH, McGlone MS, Overton JM 2016. Climate predicts the proportion of divaricate plant species in New Zealand arborescent assemblages. [Journal of Biogeography 43(9): 1881–1892.](https://doi.org/10.1111/jbi.12814)

Luebert F, Lörch M, Acuña R, Mello-Silva R, Weigend M, Mutke J 2020. Clade-specific biogeographic history and climatic niche shifts of the southern Andean-southern Brazilian disjunction in plants. In: Rull V., Carnaval A. (eds) Neotropical Diversification: Patterns and Processes. Fascinating Life Sciences. Springer, Cham. https://doi.org/10.1007/978-3-030-31167-4\_24 [Data sourced from GBIF].

Lusk CH, Wiser SK, Laughlin DC 2020. Macroclimate and topography interact to influence the abundance of divaricate plants in New Zealand. Frontiers in Plant Science 11(507). https://doi.org/10.3389/fpls.2020.00507.

Lyver, PO, Richardson, SJ, Gormley AM, Timoti P, Jones CJ, Tahi BL, 2018. Complementarity of indigenous and western scientific approaches for monitoring forest state. [Ecological Applications 28(7): 1909–1923.](https://doi.org/10.1002/eap.1787)

Marconi L, Armengot L 2020. Complex agroforestry systems against biotic homogenization: the case of plants in the herbaceous stratum of cocoa production systems. Agriculture, Ecosystems & Environment 287: 106664. [Data sourced from GBIF]

Mason NW, Holdaway RJ, Richardson SJ 2018. Incorporating measurement error in testing for changes in biodiversity. [Methods in Ecology and Evolution 9: 1296–1307.](https://doi.org/10.1111/2041-210X.12976)

McCarthy JK, Wiser SK, Bellingham PJ, Beresford RM, Campbell RE, Turner R, et al. 2021. Using spatial models to identify refugia and guide restoration in response to an invasive plant pathogen. Journal of Applied Ecology 58: 192–201. doi:10.1111/1365-2664.13756.

McGlone MS, Buitenwerf R, Richardson SJ 2016. The formation of the oceanic temperate rainforests of New Zealand. [New Zealand Journal of Botany 54: 128–155.](https://doi.org/10.1080/0028825X.2016.1158196)

McGlone MS, Buitenwerf R, Richardson SJ 2017. Oceanic Temperate Forest versus Warm Temperate Forest: a reply to Grubb et al. (2017). [New Zealand Journal of Botany 55: 1–8.](https://doi.org/10.1080/0028825X.2017.1314306)

McGlone MS, McNutt K, Richardson SJ, Bellingham PJ, Wright EF 2020. Biodiversity monitoring, ecological integrity, and the design of the New Zealand Biodiversity Assessment Framework. New Zealand Journal of Ecology 44(2): 1–12.

Milla R, Bastida JM, Turcotte MM, Jones G, Violle C, Osborne CP, Chacón-Labella J, Sosinski ÊE, Kattge J, Laughlin DC and others 2018. Phylogenetic patterns and phenotypic profiles of the species of plants and mammals farmed for food. [Nature Ecology & Evolution 2(11): 1808-1817](https://doi.org/10.1038/s41559-018-0690-4) [Data sourced from GBIF].

Mungi NA, Qureshi Q, Jhala YV 2020. Expanding niche and degrading forests: key to the successful global invasion of Lantana camara (sensu lato). Global Ecology and Conservation: e01080. [Data sourced from GBIF].

Muscarella R, Emilio T, Phillips OL, Lewis SL, Slik F, Baker WJ, et al. 2020. The global abundance of tree palms. Global Ecology and Biogeography 29(9): 1495–1514. doi:10.1111/geb.13123

Nepia RE, Clarkson BD 2018. Biological flora of New Zealand (15): *Ixerba brexioides*, tāwari. [New Zealand Journal of Botany 56: 2–5.](https://doi.org/10.1080/0028825X.2017.1402789)

Nomura M, Ohlemüller R, Lee WG, Lloyd KM, Anderson BJ 2019. Can we predict which species win when new habitat becomes available? PloS One 14(9).

Ohashi H, Hasegawa T, Hirata A, Fujimori S, Takahashi K, Tsuyama I, Nakao K, Kominami Y, Tanaka N, Hijioka Y 2019. Biodiversity can benefit from climate stabilization despite adverse side effects of land-based mitigation. Nature Communications 10(1): 1−11. [Data sourced from GBIF].

Ondei S, Brook BW, Buettel JC 2018. Nature’s untold stories: an overview on the availability and type of on-line data on long-term biodiversity monitoring. [Biodiversity and Conservation 27: 2971–2987.](https://doi.org/10.1007/s10531-018-1582-2)

Paul TS, Kimberley MO, Beets PN 2019. Thinking outside the square: Evidence that plot shape and layout in forest inventories can bias estimates of stand metrics. [Methods in Ecology and Evolution 10(3): 381-388.](https://doi.org/10.1111/2041-210X.13113)

Paul T, Kimberley MO, Beets PN 2021. Natural forests in New Zealand – a large terrestrial carbon pool in a national state of equilibrium. Forest Ecosystems 8: 34. doi:10.1186/s40663-021-00312-0.

Pelletier TA, Carstens BC, Tank DC, Sullivan J, Espíndola A 2018. Predicting plant conservation priorities on a global scale. [Proceedings of the National Academy of Sciences 115(51): 13027-13032](https://doi.org/10.1073/pnas.1804098115) [Data sourced from GBIF].

Peltzer DA, Wardle DA 2016. Soil fertility effects on tree seedling performance are light dependent: evidence from a long‐term soil chronosequence. [Oikos 125(8): 1121–1133.](https://doi.org/10.1111/oik.02878)

Peralta G, Perry GL, Vázquez DP, Dehling DM, Tylianakis JM 2020. Strength of niche processes for species interactions is lower for generalists and exotic species. Journal of Animal Ecology 89: 2145–2155.

Pertierra LR, Baker M, Howard C, Vega GC, Olalla-Tarraga MA, Scott J 2016. Assessing the invasive risk of two non-native *Agrostis* species on sub-Antarctic Macquarie Island. [Polar Biology: 1–11](https://doi.org/10.1007/s00300-016-1912-3) [Sourced from GBIF].

Pertierra LR., Aragón P, Shaw JD, Bergstrom DM, Terauds A, Olalla-Tárraga MÁ 2017. Global thermal niche models of two European grasses show high invasion risks in Antarctica. [Global Change Biology 23: 2863–2873](https://doi.org/10.1111/gcb.13596) [Data accessed via GBIF].

Poudel AS, Jha PK, Shrestha BB, Muniappan R 2019. Biology and management of the invasive weed *Ageratina* *adenophora* (Asteraceae): current state of knowledge and future research needs. [Weed Research 59(2): 79-92](https://doi.org/10.1111/wre.12351) [Data sourced from GBIF].

Pouteau R, Trueba S, Isnard S 2020. Retracing the contours of the early angiosperm environmental niche. Annals of Botany 125(1): 49–57. [Data sourced from GBIF].

Pratt PD, Pitcairn MJ, Oneto S, Kelley MB, Sodergren CJ, Beaulieu F, Knee W, Andreas J 2019. Invasion of the gall mite *Aceria genistae* (Acari: Eriophyidae), a natural enemy of the invasive weed *Cytisus scoparius*, into California, U.S.A. and predictions for climate suitability in other regions using ecological niche modelling. [Biocontrol Science and Technology 29(5): 494-513](https://doi.org/10.1080/09583157.2019.1566440) [Data sourced from GBIF].

Prebble JG, Reichgelt T, Mildenhall DC, Greenwood DR, Raine JI, Kennedy EM, Seebeck HC 2017. Terrestrial climate evolution in the Southwest Pacific over the past 30 million years. [Earth and Planetary Science Letters 459: 136–44.](https://doi.org/10.1016/j.epsl.2016.11.006)

Prevéy JS, Parker LE, Harrington CA 2020. Projected impacts of climate change on the range and phenology of three culturally-important shrub species. PloS One 15(5): e0232537. [Data sourced from GBIF].

Qin Z, Zhang JE, DiTommaso A, Wang RL, Liang KM 2016. Predicting the potential distribution of *Lantana camara* L. under RCP scenarios using ISI-MIP models. [Climatic Change 134(1–2): 193–208](https://doi.org/10.1007/s10584-015-1500-5) [Data accessed via GBIF].

Quiroga MP, Mathiasen P, Iglesias A, Mill RR, Premoli AC 2016. Molecular and fossil evidence disentangle the biogeographical history of *Podocarpus*, a key genus in plant geography. [Journal of Biogeography 43(2): 372–383](https://doi.org/10.1111/jbi.12630) [Data accessed via GBIF].

Ramsey DSL, Forsyth DM, Veltman CJ, Richardson SJ, Allen RB, Allen WJ, Barker RJ, Bellingham PJ, Jacobson CL, Nicol SJ, Robertson AW, Todd CR 2017. A management experiment reveals the difficulty of altering seedling growth and palatable plant biomass by culling invasive deer. [Wildlife Research 44: 623–636.](https://doi.org/10.1071/WR16206)

Reichgelt T, West CK, Greenwood DR 2018. The relation between global palm distribution and climate. [Scientific Reports 8(1): 4721](https://doi.org/10.1038/s41598-018-23147-2) [Data sourced from GBIF].

Renner SS, Barreda VD, Tellería MC, Palazzesi L, Schuster TM 2020. Early evolution of Coriariaceae (Cucurbitales) in light of a new early Campanian (ca. 82 Mya) pollen record from Antarctica. TAXON 69:87–99. [Data sourced from GBIF].

Rice A, Šmarda P, Novosolov M, Drori M, Glick L, Sabath N, Meiri S, Belmaker J, Mayrose I 2019. The global biogeography of polyploid plants. [Nature Ecology & Evolution 3(2): 265-273](https://doi.org/10.1038/s41559-018-0787-9) [Data sourced from GBIF].

Richardson SJ, King S, Rose AB, McGlone MS, Holdaway RJ. 2018. Post-fire recovery of a dryland forest remnant in the Wither Hills, Marlborough. [New Zealand Journal of Ecology 42(2): 1–7.](https://www.jstor.org/stable/26538113)

Roalson EH, Roberts WR 2016. Distinct processes drive diversification in different clades of Gesneriaceae. [Systematic Biology 65(4): 662-684](https://doi.org/10.1093/sysbio/syw012) [Data sourced from GBIF].

Rodríguez-Merino A, García-Murillo P, Cirujano S, Fernández-Zamudio R. Predicting the risk of aquatic plant invasions in Europe: How climatic factors and anthropogenic activity influence potential species distributions. [Journal for Nature Conservation. 2018 Sep 1;45:58-71](https://doi.org/10.1016/j.jnc.2018.08.007) [Data sourced from GBIF].

Saldaña-López A, Vilà M, Lloret F, Manuel Herrera J, González-Moreno P 2021. Assembly of species’ climatic niches of coastal communities does not shift after invasion. Journal of Vegetation Science 32(2): e12989. doi:10.1111/jvs.12989

Schmitt S, Pouteau R, Justeau D, de Boissieu F, Birnbaum P 2017. *SSDM*: An *R* package to predict distribution of species richness and composition based on stacked species distribution models. [Methods in Ecology and Evolution 8(12): 1795-1803](https://doi.org/10.1111/2041-210X.12841) [Data sourced from GBIF].

Schubert, M, Marcussen, T, Meseguer, AS, Fjellheim, S. 2019 The grass subfamily Pooideae: Cretaceous–Palaeocene origin and climate‐driven Cenozoic diversification. [Global Ecology and Biogeography 28: 1168– 1182](https://doi.org/10.1111/geb.12923) [Data sourced from GBIF].

Serra-Diaz JM, Enquist BJ, Maitner B, Merow C, Svenning JC 2017. Big data of tree species distributions: how big and how good? [Forest Ecosystems 4(1): 30](https://doi.org/10.1186/s40663-017-0120-0) [Data sourced from GBIF].

Shepherd LD, Brownsey PJ, Stowe C, Newell C, Perrie LR 2019. Genetic and morphological identification of a recurrent *Dicksonia* tree fern hybrid in New Zealand. [PLOS ONE 14(5): e0216903.](https://doi.org/10.1371/journal.pone.0216903)

Sheppard CS, Schurr FM 2018. Biotic resistance or introduction bias? Immigrant plant performance decreases with residence times over millennia. [Global Ecology and Biogeography 28: 222-237](https://doi.org/10.1111/geb.12844) [Data sourced from GBIF].

Simonsen AK, Dinnage R, Barrett LG, Prober SM, Thrall PH 2017 Symbiosis limits establishment of legumes outside their native range at a global scale. [Nature Communications 8: 14790](https://doi.org/10.1038/ncomms14790) [Data sourced from GBIF].

Simpson A, Richardson SJ, Laughlin, DC 2016. Soil–climate interactions explain variation in foliar, stem, root and reproductive traits across temperate forests. [Global Ecology and Biogeography 25: 964–978.](https://doi.org/10.1111/geb.12457)

Simpson KJ, Jardine EC, Archibald S, Forrestel EJ, Lehmann CER, Thomas GH, et al. 2021. Resprouting grasses are associated with less frequent fire than seeders. New Phytologist, 230(2): 832–844. doi:10.1111/nph.17069.

Sinnott-Armstrong MA, Donoghue MJ, Jetz WJ 2021. Dispersers and environment drive global variation in fruit colour syndromes. Ecology Letters 24(7): 1387–1399. doi:10.1111/ele.13753.

Slik JWF, Franklin J, Arroyo-Rodríguez V, Field R, Aguilar S, Aguirre N, Aiba S-I, … Zang R 2018. A phylogenetic classification of the world’s tropical forests. [Proceedings of the National Academy of Sciences of the USA 115(8): 1837–1842.](https://doi.org/10.1073/pnas.1714977115)

Slodowicz D, Descombes P, Kikodze D, Broennimann O, Müller-Schärer H 2018. Areas of high conservation value at risk by plant invaders in Georgia under climate change. [Ecology and Evolution 8(9): 4431-4442](https://doi.org/10.1002/ece3.4005) [Data sourced from GBIF].

Smale MC, Coomes DA, Parfitt RL, Peltzer DA, Mason NW, Fitzgerald NB 2016. Post-volcanic forest succession on New Zealand's North Island: an appraisal from long-term plot data. [New Zealand Journal of Botany 54(1): 11–29.](http://dx.doi.org/10.1080/0028825X.2015.1102747)

Smale MC, Wiser SK, Bergin MJ, Fitzgerald NB 2018. A classification of the geothermal vegetation of the Taupō Volcanic Zone, New Zealand. [Journal of the Royal Society of New Zealand 48(1): 21-38.](https://doi.org/10.1080/03036758.2017.1322619)

Smith AL, Hodkinson TR, Villellas J, Catford JA, Csergő AM, Blomberg SP, Crone EE, Ehrlén J, Garcia MB, Laine A-L 2020. Global gene flow releases invasive plants from environmental constraints on genetic diversity. Proceedings of the National Academy of Sciences 117(8): 4218–4227. [Data sourced from GBIF].

Smith JR, Hendershot JN, Nova N, Daily GC 2020. The biogeography of ecoregions: descriptive power across regions and taxa. Journal of Biogeography. https://doi.org/10.1111/jbi.13871 [Data sourced from GBIF].

Smith JR, Letten AD, Ke P-J, Anderson CB, Hendershot JN, Dhami MK, Dlott GA, Grainger TN, Howard ME, Morrison BML, et al. 2018. A global test of ecoregions. [Nature Ecology & Evolution 2(12): 1889–1896](https://doi.org/10.1038/s41559-018-0709-x) [Data sourced from GBIF].

Sniderman J MK, Woodhead JD, Hellstrom J, Jordan GJ, Drysdale RN, Tyler JJ, Porch N 2016. Pliocene reversal of late Neogene aridification. [Proceedings of the National Academy of Sciences 113: 1999–2004.](https://doi.org/10.1073/pnas.1520188113)

Sofaer HR, Jarnevich CS 2017. Accounting for sampling patterns reverses the relative importance of trade and climate for the global sharing of exotic plants. [Global Ecology and Biogeography 26(6): 669-678](https://doi.org/10.1111/geb.12577) [Data sourced from GBIF].

Staniczenko PP, Suttle KB, Pearson RG 2018. Negative biotic interactions drive predictions of distributions for species from a grassland community. [Biology Letters 14(11): 20180426](https://doi.org/10.1098/rsbl.2018.0426) [Data sourced from GBIF].

Staude IR, Navarro LM, Pereira HM 2020. Range size predicts the risk of local extinction from habitat loss. Global Ecology and Biogeography 29(1): 16–25. [Data sourced from GBIF].

Staude IR, Waller DM, Bernhardt-Römermann M, Bjorkman AD, Brunet J, De Frenne P, Hédl R, Jandt U, Lenoir J, Máliš F 2020. Replacements of small-by large-ranged species scale up to diversity loss in Europe’s temperate forest biome. Nature Ecology & Evolution 4: 802–808. [Data sourced from GBIF].

Steidinger BS, Crowther TW, Liang J, Van Nuland ME, Werner GD, Reich PB, Nabuurs G, de-Miguel S, Zhou M, Picard N, Herault B and the GFBI consortium 2019. Climatic controls of decomposition drive the global biogeography of forest-tree symbioses. [Nature 569: 404-408.](https://doi.org/10.1038/s41586-019-1128-0)

Tamme R, Pärtel M, Kõljalg U, Laanisto L, Liira J, Mander Ü, et al. 2021. Global macroecology of nitrogen-fixing plants. Global Ecology and Biogeography 30(2): 514–526. doi:10.1111/geb.13236

Tanentzap AJ, Lloyd KM 2017. Fencing in nature? Predator exclusion restores habitat for native fauna and leads biodiversity to spill over into the wider landscape. [Biological Conservation 214: 119–126.](https://doi.org/10.1016/j.biocon.2017.08.001)

Tedersoo L, Laanisto L, Rahimlou S, Toussaint A, Hallikma T, Pärtel M 2018. Global database of plants with root-symbiotic nitrogen fixation: NodDB. [Journal of Vegetation Science 29(3): 560-568](https://doi.org/10.1111/jvs.12627) [Data sourced from GBIF].

Testolin R, Attorre F, Borchardt P, Brand RF, Bruelheide H, Chytrý M, et al. 2021. Global patterns and drivers of alpine plant species richness. Global Ecology and Biogeography 30(6): 1218–1231. doi:10.1111/geb.13297.

Testolin R, Carmona CP, Attorre F, Borchardt P, Bruelheide H, Dolezal J, et al. 2021. Global functional variation in alpine vegetation. Journal of Vegetation Science 32(2). doi:10.1111/jvs.13000.

Tindall ML, Thomson FJ, Laffan SW, Moles AT 2016. Is there a latitudinal gradient in the proportion of species with spinescence? [Journal of Plant Ecology 10(2): 294–300.](https://doi.org/10.1093/jpe/rtw031)

Tomasetto F, Duncan RP, Hulme PE, Wiser SK. 2018. Segregation, nestedness and homogenisation in native and alien dominated plant communities. [Plant Ecology and Diversity 21: 1-10.](https://doi.org/10.1080/17550874.2018.1542751)

Troudet J, Grandcolas P, Blin A, Vignes-Lebbe R, Legendre F 2017. Taxonomic bias in biodiversity data and societal preferences. [Scientific Reports 7(1): 9132](https://doi.org/10.1038/s41598-017-09084-6) [Data sourced from GBIF].

Troudet J, Vignes-Lebbe R, Grandcolas P, Legendre F 2018. The increasing disconnection of primary biodiversity data from specimens: how does it happen and how to handle it? [Systematic Biology 67(6): 1110-1119](https://doi.org/10.1093/sysbio/syy044) [Data sourced from GBIF].

Valencia E, de Bello F, Galland T, Adler PB, Lepš J, E-Vojtko A, et al. 2020. Synchrony matters more than species richness in plant community stability at a global scale. Proceedings of the National Academy of Sciences of the United States of America 117(39): 24345– 24351. doi:10.1073/pnas.1920405117.

Valencia E, de Bello F, Lepš J, Galland T, E‐Vojtkó A, Conti L, Danihelka J, Dengler J, Eldridge DJ, Estiarte M 2020. Directional trends in species composition over time can lead to a widespread overemphasis of year-to-year asynchrony. Journal of Vegetation Science 31: 792–802.

Velázquez J, Allen RB, Coomes DA, Eichhorn MP 2016. Asymmetric competition causes multimodal size distributions in spatially-structured populations. [Proceedings of the Royal Society B-Biological Sciences 283 (20152404).](https://doi.org/10.1098/rspb.2015.2404)

Veron S, Haevermans T, Govaerts R, Mouchet M, Pellens R 2019. Distribution and relative age of endemism across islands worldwide. Scientific reports 9(1): 1–12. [Data sourced from GBIF].

Veron S, Mouchet M, Govaerts R, Haevermans T, Pellens R 2019. Vulnerability to climate change of islands worldwide and its impact on the tree of life. Scientific Reports 9(1): 1–14. [Data sourced from GBIF].

Walker GA, Gaertner M, Robertson MP, Richardson DM 2017. The prognosis for *Ailanthus altissima* (Simaroubaceae; tree of heaven) as an invasive species in South Africa; insights from its performance elsewhere in the world. [South African Journal of Botany 112: 283–289](https://doi.org/10.1016/j.sajb.2017.06.007) [Data accessed via GBIF].

Walker S, Comrie J, Head N, Ladley KJ, Clarke D 2016. Hawkweed invasion does not prevent indigenous non-forest vegetation recovery following grazing removal. [New Zealand Journal of Ecology 40(1): 137-149.](https://doi.org/10.20417/nzjecol.40.16)

Wan JZ, Wang CJ 2018. Expansion risk of invasive plants in regions of high plant diversity: a global assessment using 36 species. [Ecological Informatics 46: 8-18](https://doi.org/10.1016/j.ecoinf.2018.04.004) [Data sourced from GBIF].

Wan JZ, Wang CJ, Yu FH 2016. Risk hotspots for terrestrial plant invaders under climate change at the global scale. [Environmental Earth Sciences 75(12): 1–8](https://doi.org/10.1007/s12665-016-5826-8) [Data accessed via GBIF].

Wan JZ, Wang CJ, Yu FH 2019. Large-scale environmental niche variation between clonal and non-clonal plant species: Roles of clonal growth organs and ecoregions. [Science of The Total Environment 652: 1071-1076](https://doi.org/10.1016/j.scitotenv.2018.10.280) [Data sourced from GBIF].

Wan JZ, Zhang ZX, Wang CJ 2018. Identifying potential distributions of 10 invasive alien trees: implications for conservation management of protected areas. [Environmental Monitoring and Assessment 190: 739](https://doi.org/10.1007/s10661-018-7104-6) [Data sourced from GBIF].

Wang CJ, Li QF, Wan JZ. 2019. Potential invasive plant expansion in global ecoregions under climate change. [PeerJ 7: e6479](https://doi.org/10.7717/peerj.6479) [Data sourced from GBIF].

Wang JC, Pan BR, Albach DC 2016. Evolution of morphological and climatic adaptations in *Veronica* L. (Plantaginaceae). [PeerJ 4: p.e2333](https://doi.org/10.7717/peerj.2333) [Sourced from GBIF].

Wang Y, Xu Z 2016. Where are the alien species? Predictions of global plant species invasions under current environmental conditions and the human footprint. [Polish Journal of Environmental Studies,25(4): 1729–1738](https://doi.org/10.15244/pjoes/62094) [Data accessed via GBIF].

Warren R, Price J, Graham E, Forstenhaeusler N, VanDerWal J 2018. The projected effect on insects, vertebrates, and plants of limiting global warming to 1.5°C rather than 2°C. [Science 360(6390): 791-795](https://doi.org/10.1126/science.aar3646) [Data sourced from GBIF].

Watcharamongkol T, Christin P-A, Osborne CP 2018. C4 photosynthesis evolved in warm climates but promoted migration to cooler ones. [Ecology Letters 21(3): 376-383](https://doi.org/10.1111/ele.12905) [Data sourced from GBIF].

Whyte HD, Lusk CH 2019. Woody debris in treefall gaps shelters palatable plant species from deer browsing, in an old-growth temperate forest. [Forest Ecology and Management 448: 198-207.](https://doi.org/10.1016/j.foreco.2019.06.010)

Willard DA, Donders TH, Reichgelt T, Greenwood DR, Sangiorgi F, Peterse F, Nierop KGJ, Frieling J, Schouten S, Sluijs A 2019. Arctic vegetation, temperature, and hydrology during Early Eocene transient global warming events. [Global and Planetary Change 178: 139-152](https://doi.org/10.1016/j.gloplacha.2019.04.012) [Data sourced from GBIF].

Wiser SK, De Cáceres M 2018. New Zealand’s plot-based classification of vegetation. [Phytocoenologia 48(2): 153–161.](https://doi.org/10.1127/phyto/2017/0180)

Wood JR, Holdaway RJ, Orwin KH, Morse C, Bonner KI, Davis C, ... Dickie IA 2017. No single driver of biodiversity: divergent responses of multiple taxa across land use types. [Ecosphere 8(11): e01997.](https://doi.org/10.1002/ecs2.1997)

Wyse SV, Dickie JB 2017. Predicting the global incidence of seed desiccation sensitivity. [Journal of Ecology 105: 1082–1093](https://doi.org/10.1111/1365-2745.12725) [Data accessed via GBIF].

Yoo KO, Crowl AA, Kim KA, Cheon KS, Cellinese N 2018. Origins of East Asian Campanuloideae (Campanulaceae) diversity. [Molecular Phylogenetics and Evolution 127: 468–474](https://doi.org/10.1016/j.ympev.2018.04.040) [Data sourced from GBIF].

Young LM, Norton DA, Lambert MT 2016. One hundred years of vegetation change at Cass, eastern South Island high country. [New Zealand Journal of Ecology 40(3): 289–301.](https://doi.org/10.20417/nzjecol.40.38)

Zhang H, Eziz A, Xiao J, Tao S, Wang S, Tang Z, Zhu J, Fang J 2019. High-resolution vegetation mapping using eXtreme gradient boosting based on extensive features. [Remote Sensing 11(12): 1505](https://doi.org/10.3390/rs11121505) [Data sourced from GBIF].

Zizka A, Silvestro D, Andermann T, Azevedo J, Duarte Ritter C, Edler D, Farooq H, Herdean A, Ariza M, Scharn R and others 2019. CoordinateCleaner: Standardized cleaning of occurrence records from biological collection databases. [Methods in Ecology and Evolution 10(5): 744-751](https://doi.org/10.1111/2041-210X.13152) [Data sourced from GBIF].

Zörner J, Dymond JR, Shepherd JD, Wiser SK, Bunting P, Jolly B 2018. Lidar-based regional inventory of tall trees - Wellington, New Zealand. [Forests 9: 702-771.](https://doi.org/10.3390/f9110702)

**Popular articles**

DeCáceres M, Schmidtlein S, Wiser S 2018. Exchanging vegetation data: developing tools for the ‘Veg-X’ standard and how you can help. [IAVS Bulletin 2018/2.](https://doi.org/10.21570/BUL-201807-3)

Dickie IA, Wakelin A, Martinez-Garcia L, Richardson SJ, Makiola A, Tylianakis JM 2016. Plant root pathogens over 120,000 years of temperate rainforest ecosystem development. [bioRxiv.: 042341.](https://www.biorxiv.org/content/10.1101/042341v1.abstract)

**Contract reports**

Allen RB, Tahi B 2016. Tawa timber product-market strategy. Report prepared for the Tūhoe Tuawhenua Trust. 19 p.

Bellingham PJ, Overton JM, Thomson FJ, MacLeod CJ, Holdaway RJ, Wiser SK, Brown M, Gormley AM, Collins D, Latham DM, Bishop C, Rutledge D, Innes J, Warburton B 2016. Standardised terrestrial biodiversity indicators for use by regional councils. Manaaki Whenua – Landcare Research Contract Report LC2109.

Bellingham P, Richardson S, Gormley A, Monks A, Wiser S 2016. Department of Conservation biodiversity indicators: 2016 fact sheets. Manaaki Whenua – Landcare Research Contract Report LC2973 for the Department of Conservation.

Bellingham P, Wiser S, Burge O, Easdale T, Richardson S 2018. Potential of Tier One and alternative monitoring networks to assess the ecological integrity of alpine vegetation exposed to tahr grazing. Manaaki Whenua – Landcare Research Contract Report LC3328 for the Department of Conservation.

Bellingham PJ, Wiser S, McCarthy J, Arnst E, Innes J, Fitzgerald N 2020. Baseline information about vegetation and birds to guide kaitiakitanga in Warawara ngahere. Manaaki Whenua – Landcare Research Contract Report LC3671 for Te Rarawa Anga Mua and the Komiti Kaitiaki for Warawara ngahere.

Brandt AJ, Easdale T, Monks A, Bellingham P 2017. Summary of results for DOC state of environment report 2017. Manaaki Whenua – Landcare Research Contract Report for Department of Conservation.

Brownstein GE, Lee WG. 2017. Mt Ida Syndicate Pastoral Occupation Lease – Biodiversity Monitoring Report 2. Landcare Research Contract Report LC2804 for the Department of Conservation.

Brownstein GE. 2016. Isolepis basilaris on the Tasman River delta, Lake Pukaki monitoring report: year three, summer 2016. Landcare Research Contract Report LC2644 for Meridian Energy New Zealand Limited.

Burrows L. 2019. Final completion report for Small Advice Grant 1930-WCRC177, Carbon Sequestration on the West Coast.

Easdale T 2016. Carbon accounting implications of shrubland methods. Landcare Research Contract Report LC2558.

Easdale T 2017. Identification of most frequent vascular plants in New Zealand for the Department of Conservation. Informal Landcare Research Report for the Department of Conservation.

Easdale T, Burrows L, Bellingham P, Carswell F 2019. Rates of carbon sequestration in naturally regenerating indigenous forests. Manaaki Whenua – Landcare Research Contract Report LC3530 for Scion.

Easdale TA, Richardson SJ, Bellingham PJ 2016. Growth rates and bark allometry of pukatea (*Laurelia novae-zelandiae*). Landcare Research Contract Report LC2656 for Forest of Ruru Limited.

Easdale T, Richardson S, Wiser S 2020. Consistency in classifications of pre-1990 natural forest as tall versus regenerating. Manaaki Whenua - Landcare Research Contract Report LC3754 for the Ministry for the Environment.

Etherington T, Fergus A, Richardson S, Wiser S, Burrows L, Bellingham P, Carswell F 2019. Predicting woody vegetation state at 1990 in the Marlborough region. Manaaki Whenua – Landcare Research Contract Report LC3583 for the Ministry for Primary Industries.

Factsheet on *Podocarpus totara* var. *totara*. Montreal Process´s reporting on sacred trees in temperate and boreal forests. Manaaki Whenua – Landcare Research contribution to international reporting via the Department of Conservation, Nov 2017.

Fitzgerald N 2020. Legacy effects of conifer invasion and control in frost flats: monitoring design. Manaaki Whenua – Landcare Research Contract Report LC3790 for Bay of Plenty Regional Council.

Fitzgerald NB, Mason, Mason NWH, Smale MC 2019. Changes in Bay of Plenty frost flat heathland, 2012–2018. Manaaki Whenua – Landcare Research Contract Report LC3411 for Bay of Plenty Regional Council.

Groenteman R, Probst C, Bellgard S, Prebble J 2017. Feasibility for biological control of horehound, *Marrubium vulgare* L. [Landcare Research Contract Report LC3040 for the Horehound Biocontrol Group.](https://www.landcareresearch.co.nz/__data/assets/pdf_file/0006/156930/HorehoundFeasibilityStudy.pdf)

Holdaway RJ 2017. Design of New Zealand's 8-km grid-based plot network: static master data. [Landcare Research contract report LC2527 for Ministry for the Environment.](https://www.mfe.govt.nz/sites/default/files/media/Biodiversity/design-of-nz-8-km-grid-based-plot-network%20data.pdf)

Husheer S 2018. Kaweka Forest Park mountain beech project culling and monitoring review. Contract report by New Zealand Forest Surveys for the Department of Conservation. 58 p.

Husheer S 2018. Molesworth Vegetation 1952-2016. [Contract report by New Zealand Forest Surveys for the Department of Conservation. 65 p](http://nzforestsurveys.co.nz/wp-content/uploads/2013/12/MolesworthReport2018.pdf).

Mason N, Bellingham P 2018. Evaluating optimum measurement of biodiversity indicators. Manaaki Whenua – Landcare Research Contract Report LC3298 for Department of Conservation.

Mason NWH 2019. Thornton kānuka plot remeasurements: analyses of change in native dominance. Manaaki Whenua – Landcare Research Contract Report LC3496 for Bay of Plenty Regional Council.

Mason NWH, Price RJ 2019. Trends in the health of Bay of Plenty forest communities. Manaaki Whenua – Landcare Research Contract Report LC3433 for Bay of Plenty Regional Council.

Maule H 2019. Final Report: 406036 Botanical Survey of Apiary Sites. Manaaki Whenua – Landcare Research Contract Report LC3473 for Ministry for Primary Industries.

Maule H 2020. Botanical survey of apiary sites. Manaaki Whenua – Landcare Research Contract Report LC3804 for Ministry for Primary Industries.

McCarthy JK, Richardson SJ, Cooper JA, Bellingham PJ, Wiser SK 2019. Species distribution models of the native New Zealand Myrtaceae. Manaaki Whenua – Landcare Research Contract Report LC3458 for Scion.

Monks A, Brownstein G, Burrows L 2019. Vegetation assessment of the Te Anau Lake Control Structure dam. Manaaki Whenua – Landcare Research Contract Report LC3524 for Meridian Energy Ltd.

Monks A, Burrows L 2017. Effects on terrestrial vegetation of enhanced southern lakes hydrology scenarios. Landcare Research Contract Report LC2781 for Meridian Energy New Zealand Limited, Christchurch. 67 p.

Monks A, Schlesselmann A, Brownstein G, Burrows L 2020. Draft monitoring of shoreline vegetation at Lakes Manapouri, Te Anau and Hauroko 2020. Manaaki Whenua – Landcare Research Contract Report LC3802 for Meridian Energy.

Newsome P, Lynn I, Scheele S, Fenemor A, Vale S, Bellingham P, Arnst E, Sutherland A, Newton M, Young R 2017. Te Awa Tupua scoping study. Landcare Research Contract Report LC2721. 266 p.

Singers N 2017. Assessment of ecological effects – vegetation. [NZES Ltd Technical Report 7a.](https://www.nzta.govt.nz/assets/projects/awakino-gorge-to-mt-messenger-programme/mt-messenger-bypass/rma-applications/technical-reports/tr-7a-vegetation.pdf)

Uys R 2017. Terrestrial ecology state of the environment monitoring programme: annual data report 2016/17. [Greater Wellington Regional Council, Publication No. GW/ESCI-T-17/102, Wellington.](http://www.gw.govt.nz/assets/Our-Environment/Environmental-monitoring/Environmental-Reporting/Annual-terrestrial-ecology-SOE-monitoring-report-2016-2017.pdf)

Uys R 2019. Terrestrial Ecology State of the Environment monitoring programme: annual data report, 2018/19. Wellington, Greater Wellington Regional Council.

Wildland Consultants 2019. Potential natural ecosystems and significant natural areas for indigenous biodiversity in Southland Region. Wildland Consultants Contract Report No. 4580. Prepared for Environment Southland.

Wilmshurst J, Wood J, Fergus A, Scheele S, Walls G, Richardson S 2018. He Kainga Taurikura – A Treasured Environment. Manaaki Whenua – Landcare Research Contract Report LC3365 for Maungaharuru-Tangitū Trust.

Wilmshurst JM, Wood JR, Fergus AJ, Scheele S, Richardson SJ 2018. Whakapapa o te Taiao. Manaaki Whenua – Landcare Research Contract Report LC3364 for Te Kopere O Te Iwi O Hineuru Trust.

Wiser SK 2016. Vegetation classification of all measurements of the LUCAS natural forest plots. Wellington, Ministry for the Environment.

Wiser SK, Cooper JA, Arnst EA, Richardson SJ 2017. Mapping of native Myrtaceae in New Zealand. [Landcare Research Contract Report LC3065 for Department of Conservation.](https://www.landcareresearch.co.nz/__data/assets/pdf_file/0008/180737/Wiser_2017_Mapping_native_Myrtaceae_species_NZ.pdf)

Wright S 2017. The impact of dama wallaby (*Macropus eugenii*) and red deer (*Cervus elaphus*) on forest understorey in the Lake Okataina Scenic Reserve – 2017 update. [Unpublished report, Department of Conservation, New Zealand. DOC-3223478.](https://www.doc.govt.nz/globalassets/documents/conservation/threats-and-impacts/animal-pests/bay-of-plenty/okataina-wallaby-report.pdf)

**Conference presentations**

Affeld K, Wiser S, Payton I, De Cáceres M 2017. Using classification assignment rules to assess land use change impacts on national and regional biodiversity. Inaugural Global Forest Biodiversity Initiative Conference & GFBI-FECS Joint Symposium 2017. Forest Research in the Big Data Era, 6–9 September 2017, Beijing, China.

Affeld K, Wiser S, Payton I, Mason N, De Cáceres M 2016. Using classification assignment rules to assess land use change impacts on national and regional biodiversity. 59th Annual Symposium of the International Association for Vegetation Science, 12-17 June 2016, Pirenópolis, Brazil.

Allen K, St John M, Bellingham P, Richardson S, Peltzer D 2019. [Poster] Impacts of ungulate exclusion on forest C stocks in NZ. New Zealand Ecological Society Conference, Lincoln, New Zealand, 1–5 December 2019.

Arnst E, Wiser S, Abozeid M, Watts M 2018. [Poster] A new search tool to aid discovery of data from the National Vegetation Survey Databank. New Zealand Ecological Society Conference, 25-29 November 2018, Wellington, New Zealand.

Bellve A 2017. The distribution of epiphytic *Astelia* spp. and their role in habitat formation for other vascular epiphytes. New Zealand Plant Conservation Network Conference, 14–21 November 2017, Hokitika, New Zealand.

Bellve, A. 2019. Resolving the niche space of native perching lilies to match habitats with habitat formers. New Zealand Ecological Society Conference: 'Ngā koiora o konei / Biodiversity where we are', Lincoln, 1–5 December 2019. <https://confer.eventsair.com/nzes2019/>.

Burge O, Arnst A, Bellingham P, Boot K, Burrows L, Ford K, Richardson S, Wilmshurst J, Wiser S 2019. 128 years of post fire succession records in the New Zealand Alps. IAVS Annual Symposium, Bremen, Germany, 14–19 July 2019.

Burge O, Burrows L, Richardson S, Bellingham P, Wiser S, Arnst E, Morse C, Wilmshurst J, Ford K, Robinson M, Maule H, Buxton R, Boot K 2018. Reviving the Cockayne plots: 130 years of post-fire succession records in Arthurs Pass, NZ. New Zealand Ecological Society Conference, 25-29 November 2018, Wellington, New Zealand.

De Bello F, Gotzenberger L, Valencia E, Lepš J 2018. Accounting for directional trends in species synchrony through time: problems and solutions. 61st Annual Symposium for the International Association of Vegetation Science, 22-27 July 2018, Bozeman, Montana, USA.

De Cáceres M, Allen RB, Wiser SK, Martín-Alcón S, Coll L 2017. On the use of structural and compositional dissimilarity measures for the analysis of forest structure and dynamics. 60th International Association for Vegetation Science Symposium, 20–2 June 2017, Palermo, Italy.

Eger A, Burge O, Almond P 2020. Soil erosion rejuvenates vegetation community composition. Goldschmidt Conference, 21–26 June 2020 [virtual].

Kattenborn T, Eichel J, Wiser S, Burrows L, Schmidtlein S 2019. Combining convolutional neural networks and high-resolution UAV imagery: a powerful tool for vegetation mapping. 62nd Annual Symposium of the International Association for Vegetation Science, Bremen, Germany, 14−19 July 2019.

McCarthy J, Richardson S, Bellingham P, Beresford R, Campbell R, Turner R, Wiser S 2019. Mapping Aotearoa’s Myrtaceae. Myrtle Rust Science Symposium, Auckland, 9–10 September 2019.

McCarthy J, Richardson S, Bellingham P, Beresford R, Campbell R, Turner R, Wiser S 2019. Using spatial models to identify refuguia and guide restoration as part of Aotearoa's response to myrtle rust. New Zealand Ecological Society Conference: 'Ngā koiora o konei / Biodiversity where we are', Lincoln, 1–5 December 2019. https://confer.eventsair.com/nzes2019/.

McCarthy J, Richardson S, Wiser S 2018. Mapping the distributions of Aotearoa's native Myrtaceae. New Zealand Ecological Society Conference, Wellington, 25-29 November 2018, Wellington, New Zealand.

Richardson SJ 2020. Holy grail or flight of fancy?: can plant functional traits predict ecosystem function? Keynote to the New Zealand Ecological Society, 4 December 2020, Lincoln University, New Zealand.

Sapsford S 2019. Pine invasion drives loss of soil fungal diversity. Environmental DNA Workshop, University of Otago, Dunedin, New Zealand.

Sapsford S 2020. Pine invasion drives loss of soil fungal diversity. New Zealand Microbial Consortium, Auckland, New Zealand.

Schmidtlein S, Wiser S, Burrows L, Kattenborn T 2019. A top-down perspective on forest canopy traits in a soil chronosequence. 62nd Annual Symposium of the International Association for Vegetation Science, Bremen, Germany, 14–19 July 2019.

Vanderhoorn J, Perry G, Wilmshurst J, Richardson S 2019. [Poster] A sighting of a ghost taxon: modelling the distribution of Beilschmiedia tawa in indigenous forests through co-occurring species and pollen signals, New Zealand. New Zealand Ecological Society Conference, Lincoln, New Zealand, 1–5 December 2019.

Wiser S, Affeld K, DeCáceres M 2018. Using classification assignment rules to assess land use change impacts on national and regional forest biodiversity: a case study using the Mokihinui dam proposal. New Zealand Ecological Society Conference, 25-29 November 2018, Wellington, New Zealand.

Wiser SK, Allen RB, Bellingham PJ, MacKenzie DI, Arnst E, Hurst JM 2017. Distance-decay in tree demographic responses to an earthquake: Natural disturbance and conservation management. 60th International Association for Vegetation Science Symposium, 20–24 June 2017, Palermo, Italy.

Wiser SK, Lusk C, Laughlin D 2019. Macroclimate mediates the distribution of plant functional types across topographic gradients: the case of New Zealand’s divaricate plants. 62nd Annual Symposium of the International Association for Vegetation Science, Bremen, Germany, 14–19 July 2019.

Wiser SK, McCarthy J, Bellingham P 2019. Revising a vegetation map for Warawara ngahere. Presentation to a wānanga of Te Rarawa Anga Mua and the Komiti Kaitiaki for Warawara ngahere, Te Rūnanga o Te Rarawa, Kaitaia, 13 November 2019.

Zörner J, Dymond JR, Shepherd JD, Wiser SK, Pairman D, Sabetizade M 2019. Joint use of space-borne SAR, optical imagery and air-borne LiDAR for improved mapping of forest structural types in New Zealand. GeoComputation, 18-21 September 2019, Queenstown, New Zealand.

Zörner J, Dymond JR, Wiser SK, Shepherd JD, Jolly B 2018. Using airborne LiDAR to study the spatial distribution of tall trees in Greater Wellington, New Zealand. European Geosciences Union (EGU) General Assembly, 7-12 April 2019, Vienna, Austria.

**Theses**

Beckmann M 2018. In search of similarities in invasive plant species - comparing native and invasive populations of six clonal plant species in Germany and New Zealand. [Unpublished PhD thesis, Christian-Albrechts Universität zu Kiel, Kiel, Germany.](https://macau.uni-kiel.de/receive/diss_mods_00022520)

Bellve A 2018. The distribution of epiphytic *Astelia* and their role in habitat formation. [Unpublished MSc thesis, University of Auckland, Auckland, New Zealand.](https://researchspace.auckland.ac.nz/bitstream/handle/2292/45059/whole.pdf?sequence=2)

Greer PA. Novel habitats, rare plants and root traits. [Unpublished MSc thesis, Lincoln University, Christchurch, New Zealand.](https://researcharchive.lincoln.ac.nz/bitstream/handle/10182/9600/Greer_Masters.pdf?sequence=5&isAllowed=y)

Innes S 2020. Adaptation to climate in space and time. MSc thesis, University of Toronto, Canada. [Data sourced from GBIF].

Nepia RE 2020. Understanding the role and impact of introduced honey bees in a submontane indigenous forest ecosystem. PhD thesis, University of Waikato, NZ.

Nkuna KV 2018. Risk analysis of alien grasses occurring in South Africa. [Unpublished MSc thesis, Stellenbosch University, Stellenbosch, South Africa](http://opus.sanbi.org/bitstream/20.500.12143/6206/1/Nkuna_2018_MSc_SU.pdf) [Data sourced from GBIF].

Nomura M 2020. Past and current drivers of species climatic niches and geographic distributions. PhD thesis, University of Otago, NZ.

Popovic G 2017. Covariance modelling and inference for multivariate discrete data in ecology. [Unpublished PhD thesis, University of New South Wales, Sydney, Australia.](http://unsworks.unsw.edu.au/fapi/datastream/unsworks%3A46683/SOURCE02?view=true)

Rossignaud L 2020. Land use effects on biodiversity and ecosystem services. PhD thesis, University of Canterbury, NZ.

Viljoen JA 2016. Ecological influences in the biogeography of the Austral sedges. [Unpublished MSc thesis, University of Cape Town, Cape Town, South Africa](https://open.uct.ac.za/bitstream/handle/11427/20302/thesis_sci_2016_viljoen_jan_adriaan.pdf?sequence=1&isAllowed=y) [Data accessed via GBIF].

**Book chapters**

Allen RB 2021. Rusa timorensis. In: King CM, Forsyth DM eds. The Handbook of New Zealand Mammals, 3rd edn. Melbourne, CSIRO Publishing. Pp. 431–511.