

Rejmánek M. a kol.: Jak rychle a proč vymírají rostliny v antropocénu? (Živa 2021, 5: 219–223)

Citovaná a další použitá literatura

Neustále rostoucí počet publikací o vymírání rostlin se stává značně nepřehledným. Pokusili jsme se proto vybrat a roztrždit alespoň některé prameny podle témat, kterými se v našem článku zabýváme.

Úvod:

ANTONELLI, A., et al., 2020. State of the World's Plants and Fungi 2020. Royal Botanic Gardens, Kew, 96 s. <https://www.kew.org/sites/default/files/2020-10/State%20of%20the%20Worlds%20Plants%20and%20Fungi%202020.pdf>

BORSCH, T., et al., 2020. World Flora on Line: Placing taxonomists at the heart of a definitive and comprehensive global resource on the world's plants. *Taxon* 69, 1311-1341.

BRUMMITT, N.A., 2015. Green Plants in the Red: A Baseline Global Assessment for the IUCN Sampled Red List Index for Plants. *PLOS ONE* 10, e.0135152.

CLINE, B., 2020. Irreplaceable design: on the non-instrumental value of biological variation. *Ethics & The Environment* 25, 45-72.

CONDAMINE, F.L., et al., 2020. The rise of angiosperms pushed conifers to decline during global cooling. *PNAS*, 117, 28867-28875.

DASGUPTA, P., et al. (eds.), 2019. *Biological Extinction: New Perspectives*. Cambridge University Press, 432 s.

HUMPHREYS, A.M., et al., 2019. Global dataset shows geography and life form predict modern plant extinction and rediscovery. *Nature Ecology & Evolution* 3, 1043-1047.

JABLONSKI, D., 2004. Extinction: past and present. *Nature* 427, 589.

KAREIVA, P., LEVIN, S.A. (eds.), 2003. *The Importance of Species*. Princeton University Press, 427 s.

LAWTON, J.H., MAY, R.M. (ed.), 1995. *Extinction Rates*. Oxford University Press, 233 s.

MAIER, D.S., 2012. *What's So Good About Biodiversity?* Springer, 568 s.

NEWMAN, J.A., VARNER, G., LINQUIST, S., 2017. *Defending Biodiversity*. Cambridge University Press, 441 s.

SMITH, I.A., 2016. *The Intrinsic Value of Endangered Species*. Routledge, 157 s.

Jak spolehlivá jsou naše data?:

CROUCH, N.R., 2016. Rediscovery of *Adenia natalensis* W.J. de Wilde (Passifloraceae) after 150 years. *Haseltonia* 22, 73-80.

ESSL, F., et al., 2013. Native, alien, endemic, threatened, and extinct species diversity in European countries. *Biological Conservation* 164, 90-97.

KNAPP, W.M., et al., 2020. Vascular plant extinction in the continental United States and Canada. *Conservation Biology* 35, 360-368.

KNAPP, W.M., et al., 2020. Regional records improve data quality in determining plant extinction rates. *Nature Ecology & Evolution* 4, 512-514.

REJMÁNEK, M., 2018. Vascular plant extinctions in California: A critical assessment. *Diversity and Distributions* 24, 129-136.

RYDLO, J., 1995. Dlouhodobá pozorování populace *Epipactis albensis* na trvalé ploše v Libickém luhu. *Muzeum a současnost, Roztoky, ser. natur.*, 9, 81–98. ^[1]_{SEP}

SOCHOR, M., et al., 2018. Rediscovery of *Thismia neptunis* (Thismiaceae) after 151 years. *Phytotaxa* 340, 71-78.

SQUIRES, L. & VAN DER VALK, A.G. (1992) Water-depth tolerances of the dominant emergent macrophytes of the Delta Marsh, Manitoba. *Canadian Journal of Botany*, 70, 1860–1867. ^[L]_[SEP]

STICA, A., 2017. *Orchis italica* Poir. (Orchideaceae): rediscover after four centuries of presumably extinct species in Mt. Vesuvius, Italy. *Annali di Botanica* 7, 71-74.

VOROTSOVA, M.S., et al., 2021. Inequality in plant diversity knowledge and unrecorded plant extinctions: An example from the grasses of Madagascar. *Plants People Planet* 3, 45-60.

Antropogenní změny prostředí:

AEDO, C. et al., 2015. Extinctions of vascular plants in Spain. *Nordic Journal of Botany* 33, 83-100.

BOND, W.J., et al., 1988. When is an island not an island? Insular effects and their causes in fynbos shrublands. *Oecologia* 77, 515-521.

CARDOSO DA SILVA, J.M., et al., 2019. Extinction risk of narrowly distributed species of seed plants in Brazil due to habitat loss and climate change. *PeerJ*, doi:10.7717/peerj.7333.

ČEŘOVSKÝ, J. A kol., 1999. Červená kniha ohrožených a vzácných druhů rostlin a živočichů ČR a SR. Díl 5 (Vyšší rostliny). *Příroda*, Bratislava, 453 s.

CHYTRÝ, M. a kol., 2020. Červený seznam biotopů České republiky. *Příroda* 41, 1-172.

COMPAGNONI, A., et al. 2021. Increasing temperature threatens already endangered coastal dune plant. *Ecosphere* 12, e03454.

DZWONKO, Z., LOSTER, S., 1987. The number and distribution of vascular plant

species in island forest communities in the northern part of the West Carpathian foothills. *Folia Geobotanica et Phytotaxonomica* 22, 337-448.

GRULICH, V., 2017. Červený seznam cévnatých rostlin ČR. *Příroda* 35, 75-132.

HANNAH, L., (ed.), 2012. Saving Million Species. Extinction Risk from Climate Change. Island Press, Washington, D.C., 417 s.

HANTSON, S., et al., 2021. Warming as a driver of vegetation loss in the Sonoran Desert of California. *Journal of Geophysical Research: Biogeosciences* 126, e2020JG005942.

KHAPUGIN, A.A., et al., 2020. Anthropogenic drivers to regional extinction of threatened plants: insights from regional RED Data Books of Russia. *Biodiversity and Conservation* 29, 2765-2777.

LE ROUX, J.J., et al., 2019. Recent anthropogenic plant extinctions differ in biodiversity hotspots and coldspots. *Current Biology* 29, 2912-2918.

LENNARTSSON, T., 2002. Extinction thresholds and disrupted plant-pollinator interactions in fragmented plant populations. *Ecology* 83, 3060-3072.

LOAIRE, S.R., et al., 2008. Climate change and the future of California's endemic flora. *PLoS ONE* 3, e2502.

LOVEJOY, T.E., HANNAH, L., 2019. Biodiversity and Climate Change. Yale University Press, 387 s.

MALCOM, J.R., et al., 2006. Global warming and extinctions of endemic species from biodiversity hotspots. *Conservation Biology* 20, 538-548.

MANES, S., et al., 2021. Endemism increases species' climate change risk in areas of global biodiversity importance. *Biological Conservation* 257, 109070.

NOMOTO, H.A., ALEXANDER, J.M., 2021. Drivers of local extinction risk in alpine plants under warming climate. *Ecology Letters* 24, 1157-1166.

NTSHANGA, N.K. et al., 2021. Assessing the threat of landscape transformation and habitat fragmentation in a global biodiversity hotspot. *Austral Ecology*, doi:10.1111/aec.13037.

PROCHÁZKA, F., ŠTECH, M., 2002. Komentovaný černý a červený seznam cévnatých rostlin české Šumavy. Správa NP a CHKO & Eko-Agency KOPR, Vimperk, 140 s.

REJMÁNEK, M., 1983. Teoretická východiska ostrovní biogeografie. *Živa* 1/1983, 4-7.

REJMÁNEK, M., 2020. Globální oteplování, změny krajiny a ztráty biodiversity. *Živa* 5/2020, 210-214.

REYES-CHÁVEZ, J., et al., 2021. Nowhere to escape – diversity and community composition of ferns and lycophytes on the highest mountain in Honduras. *Journal of Tropical Ecology* 37, 72-81.

SAX, D.F., et al., 2013. Niche syndromes, species extinction risk, and management under climate change. *Trends in Ecology & Evolution* 28, 517-523.

SPERLE, T., BRUELHEIDE, H., 2021. Climate change aggravates bog species extinctions in the Black Forest (Germany). *Diversity and Distributions* 27, 282-295.

WIENS, J.J., 2016. Climate-related local extinctions are already widespread among plant and animal species. *PLOS Biology* 14, e2001104.

ZHANG, J., et al., 2017. Extinction risk of North American seed plants elevated by climate and land-use change. *Journal of Applied Ecology* 54, 303-312.

Vliv biologických invazí:

ASLAN, C.E., DICKSON, B.G., 2020. Non-native plants exert strong but under-studied influence on fire dynamics. *NeoBiota* 61, 47-64.

ATKINSON, I., 1989. Introduced animals and extinctions. In: D.W. Western, Pearl, M.C. (eds.): *Conservation for the Twenty-first Century*. Oxford University Press, str. 54-75.

BLEEKER, W., et al., 2007. Interspecific hybridization between alien and native plant species in Germany and its consequences for biodiversity. *Biological Conservation* 137, 248-253.

BELLARD, C., et al., 2016. Alien species as a driver of recent extinctions. *Biology Letters* 12, 20150623,.

CHRISTOPHERSEN, E., CAUM, E.L., 1931. Vascular plants of the leeward islands, Hawaii. *Bernice P. Bishop Museum Bulletin* 81, 1-41.

COATES, D.J., et al., 2015. Significant genetic diversity loss following pathogen driven population extinction in the rare endemic *Banksia brownii* (Proteaceae). *Biological Conservation* 192, 353-360.

COURCHAMP, F., et al., 2003. Mammal invaders on islands: impact, control and control impact. *Biological Reviews* 78, 347-383.

COYNE, P., 2010. Ecological rebound on Phillip Island, South Pacific. *Ecological Management & Restoration* 11, 4-15.

DANTON, P., PERRIER, C., 2005. Notes sur la disparition d'une espece emblématique: *Robinsonia berteroi* (DC.) Sanders, Stussy & Martic. (Asteraceae), dans l'île Robinson Crusoe, archipel Juan Fernández (Chili). *J. Bot. Soc. Bot. France* 31, 3-8.

D'ANTONIO, C.M., VITOUSEK, P.M., 1992. Biological invasions by exotic grasses, the grass/fire cycle, and global change. *Annual Review of Ecology and Systematics* 23, 63-87.

DARWIN, Ch., 1959. *Cesta kolem světa*. Mnadá fronta, 537 s.

DUENAS, M.-A., 2021. The threat of invasive species to IUCN-listed critically endangered species: A systematic review. *Global Ecology and Conservation* 26, e01476.

FENSHAM, R.J., et al., 2020. Imminent extinction of Australian Myrtaceae by fungal disease. *Trends in Ecology & Evolution* 35, 554-557.

- FEURTEY, A., et al., 2020. Threat to Asian wild apple trees posed by gene flow from domesticated apple trees and their “pestified“ pathogens. *Molecular Ecology* 29, 4925-4941.
- GRAY, A., 2005. The conservation of the endemic vascular flora of Ascension Island and threats from alien species. *Oryx* 39, 449-453.
- HALL, R.J., et al., 2006. Explaining the explosion: modelling hybrid invasions. *Proceedings of the Royal Society B* 273, 1385-1389.
- HEJDA, M. a kol. 2009. Impact of invasive plants on the species richness, diversity and composition of invaded communities. *Journal of Ecology* 97, 393–403.
- JOHNSON, M.G., et al., 2016. Evidence for genetic erosion of California native tree, *Platanus racemosa*, via recent, ongoing introgressive hybridization with an introduced ornamental species. *Conservation Genetics* 17, 593-602.
- KRAHULCOVÁ A., KRAHULEC F., KIRSCHNER J., 1996. Introgressive hybridization between a native and an introduced species: *Viola lutea* subsp. *sudetica* × *V. tricolor*. – *Folia Geobotanica et Phytotaxonomica* 31: 219–244.
- LAMBDON, P., 2012. Flowering Plants & Ferns of St Helena. Pisces Publications, Bergshire, 624 s.
- LAMBDON, P., CRONK, Q., 2020. Extinction dynamics under extreme conservation threat: The flora of St Helena. *Frontiers in Biology and Evolution* 8, article 41.
- MACKOVÁ, L., et al., 2018. Crop-to-wild hybridization in cherries – Empirical evidence from *Prunus fruticosa*. *Evolutionary Applications* 11, 1748-1759.
- POWELL, K.J., et al., 2013 Invasive plants have scale-dependent effects on diversity by altering species-area relationships. *Science* 339, 316-318.
- PRAUSOVÁ, R., et al., 2020. Nine decades of major compositional changes in a Central European beech forest protected area. *Plant Ecology*, 221, 1005-1016.

REJMÁNEK, M. 2012. Assessing the impacts of plant invaders on native plant species diversity. In: CONABIO, ed. *Proceedings of the 2012 Weeds Across Borders Conference*. Cancún, Quintana Roo, México, 63 –69.

ROONEY, T.P., ROGERS, D.A., 2011. Colonization and effects of garlic mustard (*Alliaria petiolata*), European buckthorn (*Rhamnus cathartica*), and Bell's Honeysuckle (*Lonicera x bella*) on understory plants after five decades in southern Wisconsin forests. *Invasive Plant Science and Management* 4, 317-325.

SCHIERENBECK, K.A., 2011. Hybridization and introgression. In: D. Simberloff a M. Rejmánek (eds.) *Encyclopedia of Biological Invasions*. Berkeley, University of California Press, str. 342-346.

STACE, C.A., CRAWLEY, M.J., 2015. *Alien Plants*. William Collins, London, 626 s.

THOMAZ, S.M., et al., 2012. Using space-for-time substitution and time sequence approaches in invasion ecology. *Freshwater Biology* 57, 2401-2410.

WHISENANT, S.G., 1990. Changing fire frequencies on Idaho's Snake River plains: ecological and management implications. In: E. D. McArthur a kol. (eds.) *Proceeding-Symposium on cheatgrass invasion, shrub die-off, and other aspects of shrub biology and management*, USDA Forest Service Intermountain Research Station General Technical Report INT-276: 4–10.

Geograficko-biologické predisposice:

BOND, W. J. (1995). Assessing the risk of plant extinction due to pollinator and disperser failure. In J. H. Lawton & R. M. May (Eds.), *Extinction Rates* (pp. 131–146). Oxford, UK: Oxford University Press.

BOYER, A.G., 2008. Extinction patterns in the avifauna of the Hawaiian Islands.

Diversity and Distribution 14, 509-517.

BOYER, A.G., JETZ, W., 2014. Extinctions and the loss of ecological function in island bird communities. *Global Ecology and Biogeography* 23, 679-688.

CARPENTER, J.K., 2020. The forgotten fauna: Native vertebrate seed predators on islands. *Functional Ecology* 34, 1802-1813.

DANIHELKA, J., HANUŠOVÁ, M., 1995: Poznámky k současnému stavu slanomilné flóry a vegetace v okolí Nesytu u Sedlce, *Zprávy České botanické společnosti*, roč. 30, suppl. 1, s. 135–146.

DUNCAN, R.P., YOUNG, J.R., 2000. Determinants of plant extinction and rarity 145 years after European settlement of Auckland, New Zealand. *Ecology* 81, 3048-3061.

ESPELAND, E.K., EMAM, T.M., 2011. The value of structuring rarity: the seven types and links to reproductive ecology. *Biodiversity and Conservation* 20, 963-985.

GABRIELOVÁ, J., et al., 2013. Can we distinguish plant species that are rare and endangered from other plants using their biological traits? *Folia Geobotanica* 48, 449-466.

GODEFROID, S., et al., 2014. Do plant reproductive traits influence species susceptibility to decline? *Plant Ecology and Evolution* 147, 154-164.

LENNARTSSON, T., 2002. Extinction thresholds and disrupted plant-pollinator interactions in fragmented plant populations. *Ecology* 83, 3060-3072.

MARGI, D., et al., 2020. Linking worldwide past and present conifer vulnerability. *Quaternary Science Reviews* 250, 106640.

MONKS, A., BURROWS, L., 2014. Are threatened plant species specialists, or just more vulnerable to disturbance? *Journal of Applied Ecology* 51, 1228-1235.

ORNDUFF, R. 1976. The reproductive system of *Amsinckia grandiflora* a distylous species. *Systematic Botany* 1, 57-66.

- PANTONE, D.J., PAVLIK, B.M., 1995. The reproductive attributes of an endangered plant as compared to a weedy congener. *Biological Conservation* 71, 305-311.
- PAVLIK, B.M. et al., 1993. The recovery of an endangered plant. I. Creating a new population of *Amsinckia grandiflora*. *Conservation Biology* 7, 510-526.
- RABINOWITZ, D., 1981. Seven forms of rarity. The biological aspects of rare plant conservation. In: H. Synge (ed.) *The Biological Aspects of Rare Plant Conservation*, str. 205-217. Wiley, Chichester, UK.
- ROGERS, H.S., et al., 2017. Effects of an invasive predator cascade to plants via mutualism disruption. *Nature Communications* 8, 14557.
- SAAR, L., et al., 2012. Which plant traits predict species loss in calcareous grasslands with extinction debt? *Diversity and Distributions* 18, 808-817.
- SCHOEN, D.J., et al., 1997. Evolutionary history of the mating system in *Amsinckia* (Boraginaceae). *Evolution* 51, 1090-1099.
- SLAVÍK, B. (ed.), 1989. Vybrané ohrožené druhy flóry ČSR. *Studie ČSAV* 10, Praha, 163 s.
- STAUDE, I.R., et al., 2020. Range size predicts the risk of local extinction from habitat loss. *Global Ecology and Biogeography* 29, 16-25.
- STEFANAKI, A., et al., 2015. Lessons from Red Data Books: Plant vulnerability increases with floral complexity. *PLOS ONE* 10, e0138414.
- ŠUMBERTOVÁ, K., 2007. Vegetace jednoletých sukulentních halofytů (*Thero-Salicornietea strictae*). In: M. Chytrý (ed.) *Vegetace České republiky 1. Travná a keříčková vegetace*. Academia, Praha, str. 143-149.

VASILEV, D., GREENWOOD, S., 2021. The role of climate change in pollinator decline across the Northern Hemisphere is underestimated. *Science of Total Environment* 775, 145788.

WALKER, K.J., PRESTON, C.D., 2006. Ecological predictors of extinction risk in the flora of lowland England, UK. *Biodiversity and Conservation* 15, 1913-1942.

ZAMORA-GUTIERREZ, V., et al., 2021. Vulnerability of bat-plant pollination interactions due to environmental change. *Global Change Biology* 27, 3367-3382.

ZETTLEMOYER, M.A., et al., 2019. Species characteristics affect local extinctions. *American journal of Botany* 106, 547-559.

Jak zachránit ohrožené taxony?:

AKCAKAYA, H.R., et al., 2018. Quantifying species recovery and conservation success to develop an IUCN Green List of species. *Conservation Biology* 32, 1128-1138.

BILZ, M., et al., 2011. *European Red List of Vascular Plants*. Publications Office of the European Union, Luxembourg, 130 s.

BOWLES, M.L., WHELAN, C.J. (eds.), 1994. *Restoration of Endangered Species*. Cambridge University Press, 395 s.

BRUMMITT, N.A., et al., 2015. Green plants in the Red: A baseline global assessment for the IUCN sampled Red List Index for plants. *PLoS ONE* 10(8), e0135152.

CASAZZA, G., et al., 2021. Combining conservation status and species distribution models for planning assisted colonisation under climate change. *Journal of Ecology* 109, 2284-2295.

CROPPER, S., 1993. Management of Endangered Plants. CSIRO Publications, Melbourne, 182 s.

DALRYMPLE, S.E., et al., 2021. Exploring the potential for plant translocation to adapt to a warming world. *Journal of Ecology* 109, 2264-2270.

DONALD, C.J. (ed.), 2015. Proactive Strategies for Protecting Species. University of California Press, Oakland, CA, 260 s.

DOYLE, C.A.T., et al., 2021. Preparing threatened plants for translocation: does home soil addition and nutrient loading improve growth and flowering? *Plant Ecology* 222: 829-842.

FALK, D.A., HOLSINGER, K.E. (eds.), 1991. Genetics and Conservation of Rare Plants. Oxford University Press, 283 s.

FALK, D.A., et al., 1996. Restoring Diversity: Strategies for Reintroduction of Endangered Plants. Island Press, Washington, D.C., 495 s.

FOREST, F., et al., 2018. Gymnosperms on the EDGE. *Scientific Reports* 8, 6053.

FRANKHAM, R., et al., 2019. A Practical Guide for Genetic Management of Fragmented Animal and Plant Populations. Oxford University Press, 172 s.

GUERRANT, E.O. , PAVLIK, B.M., 1998. Reintroduction of rare plants: genetics, demography and the role of *ex situ* conservation methods. *Conservation Biology: For the Coming Decade*. 2nd ed. (ed. by P.L. Fiedler and P.M. Kareiva), str. 80-108. Chapman & Hall, New York.

GUO, J.-L., et al., 2019. Conservation strategy for aquatic plants: endangered *Ottelia acuminata* (Hydrocharitaceae) as a case study. *Biodiversity and Conservation* 28, 1533-1548.

HEYWOOD, V., et al. (Eds.), 2018. *BGCI and IABG's Species Recovery Manual*. Botanic Gardens Conservation International, Richmond, United Kingdom, 100 s.

https://www.bgci.org/wp/wp-content/uploads/2019/04/Species_Recovery_Manual.pdf

HEYWOOD, V., 2019. Recovering threatened plant species and their habitats: The need for integrated action. *Plant Diversity* 41, 33-35.

ISMAIL, S.A., et al., 2021. Horticultural plant use as a so-far neglected pillar of ex situ conservation. *Conservation Letters* 2021, e12825.

JONGEPIEROVÁ, I. a kol. 2018. *Ekologická obnova v České republice II*. Agentura ochrany přírody a krajiny České republiky, Praha, 204 s.

KRUPNICK, G.A., KRESS, W.J. (eds.), 2005. *Plant Conservation. A Natural History Approach*. The University of Chicago Press, 346 s.

MILHOUB, J.-B., et al., 2017. Setting temporal baselines for biodiversity: the limits of available monitoring data for capturing the full impact of anthropogenic pressures. *Scientific Reports* 7, 42591.

PELLETIER, T.A., et al., 2018. Predicting plant conservation priorities on a global scale. *PNAS* 115, 13027-13032.

PEMBERTON, R.W., 2010. Biotic resource needs of specialist orchid pollinators. *Biological Reviews* 76, 275-292.

PROKEŠOVÁ, H. a kol., 2016. Obnova slanomilné vegetace na Slanisku u Nesytu pastvou koní. https://www.rmm.cz/regiom/2016/06_prokesova_1.pdf

REN, H. (ed.), 2020. Conservation and Reintroduction of Rare and Endangered Plants in China. Springer, Singapore, 242 s.

SWARTS, N.D., DIXON, K.W., 2017. Conservation Methods for Terrestrial Orchids. J.Ross Publishing, Plantation, FL, 230 s.

SYNGE, H. (ed.), 1981. The Biological Aspects of Rare Plant Conservation. Wiley, New York, 558 s.

URBANSKA, K.M., GRODZINSKA, K. (eds.), 1995. Restoration Ecology in Europe. Geobotanical Institute SFIT, Zürich, 137 s.

VOLIS, S., 2019. Conservation-oriented restoration – a two for one method to restore both threatened species and their habitats. *Plant Diversity* 41, 50-58.

ZHAO, DA-KE, et al., 2021. Orchid reintroduction based on seed germination-promoting mycorrhizal fungi derived from protocorms of seedlings. *Frontiers in Plant Science* 12, Article 701152.