

*DUC/DUI supported/staff research

*Bansal, S., B.A. Tangen, R.A. Gleason, P. Badiou, and I.F. Creed. 2022. [Land management strategies influence soil organic carbon stocks of prairie potholes of North America](#). Pages 273-285 in K.W. Krauss, Z. Zhu, and C.L. Stagg, editors. *Wetland Carbon and Environmental Management*, Geophysical Monograph 267, John Wiley & Sons, New York, New York, USA.

Bertin, A., A. Lozada, and N. Gouin. 2022. [Species-genetic diversity correlations through the lens of spatial autocorrelation: Insights from high Andean wetlands](#). *Landscape Ecology* 37:2399-2412.

Besterman, A.F., R.W. Jakuba, W. Ferguson, D. Brennan, J.E. Costa, and L.A. Deegan. 2022. [Buying time with Runnels: A climate adaption tool for salt marshes](#). *Estuaries and Coasts* 45:1491-1501.

Bezabih Beyene, J. Li, J. Yuan, Y. Dong, D. Liu, Z. Chen, J. Kim, H. Kang, C. Freeman, and W. Ding. 2022. [Non-native plant invasion can accelerate global climate change by increasing wetland methane and terrestrial nitrous oxide emissions](#). *Global Change Biology* 28:5453-5468.

Bonczek, E.S., K.M. Ringelman, J.R. Marty, and S.A. Collins. 2022. [Temporal variation and landcover influence survival in adult female mottled ducks](#). *Journal of Wildlife Management* 86:e22247.

Booth, D.T., J.C. Likins, S.E. Cox, J.B. Norton, and R.C. Anderson. 2022. [Grazing increases soil warming in headwater wetlands: Importance to land managers and water users](#). *Ecosystems* 25:1052-1065.

Broussard III, W.P., J.M. Visser, and R.P. Brooks. 2022. [Quantifying vegetation and landscape metrics with hyperspatial unmanned aircraft system imagery in a coastal oligohaline marsh](#). *Estuaries and Coasts* 45:1058-1069.

Campbell, C.J., C.S. James, K. Morris, J.M. Nicol, R.F. Thomas, D.L. Nielsen, S.L. Gehrig, G.J. Palmer, S. Wassens, F. Dyer, M. Southwell, R.J. Watts, N.R. Bond, and S.J. Capon. 2022. [Blue, green and in-between: Objectives and approaches for evaluating wetland flow regimes based on vegetation outcomes](#). *Marine & Freshwater Research* 73:1212-1224.

Carter, A. and R. Christoffel. 2022. [Social networks as conservation practice: Targeting wetland conservation for women landowners](#). *Journal of Soil and Water Conservation* 77:69A-74A.

Correa, R.E., K. Xiao, S.R. Conrad, P.D. Wadnerkar, A.M. Wilson, C.J. Sanders, and I.R. Santos. 2022. [Groundwater carbon exports exceed sediment carbon burial in a salt marsh](#). *Estuaries and Coasts* 45:1545-1561.

Coyne, K. 2022. [Wetlands on the farm: Potent, nutrient-capturing tools in \(relatively\) small packages](#). *Crops & Soils* 55:4-11.

*Creed, I.F., P. Badiou, E. Enanga, D.A. Lobb, J.K. Pattison-Williams, P. Lloyd-Smith, and M. Gloutney. 2022. [Can restoration of freshwater mineral soil wetlands deliver nature-based climate solutions to agricultural landscapes](#). *Frontiers in Ecology and Evolution* 10:932415.

Cruz, M., J. González-Villa, J. Lefebvre, S.G. Gilliland, F. St.-Pierre, M. English, and C. Lepage. 2022. [Multi-image flock size estimation with CountEM: A case study with half a million common eiders and greater snow geese](#). *Ecosphere* 13:e4174.

Dwyer, C., J. Millett, L. Jones, R.P. Bartholomeus, L. van Willegen, A. Chavasse, and R.J. Pakeman. 2022. [Patterns of variation in plant diversity vary over different spatial levels in seasonal coastal wetlands](#). *Diversity and Distributions* 28:1875-1890.

*Dyson, M.E., S.M. Slattery, and B.C. Fedy. 2022. [Multiscale nest-site selection of ducks in the Western Boreal Forest of Alberta](#). *Ecology and Evolution* 12:e9139.

Ellis, M.B., C.A. Miller, and S.G. Pallazza. 2022. [The effect of individual harvest on crippling losses](#). *Wildlife Society Bulletin* 46:e1352.

*Ellis, S.L., M.G. Lohman, J.S. Sedinger, P.J. Williams, and T.V. Riecke. 2022. [Long-term trends and drought: Spatiotemporal variation in juvenile sex ratios of North American ducks](#). *Ecology and Evolution* 12:e9099.

Evans, M.G., D.M. Alderson, C.D. Evans, A. Stimson, T.E.H. Allott, C. Goulsbra, F. Worrall, T. Crouch, J. Walker, M.H. Garnett, and J. Rowson. 2022. [Carbon loss pathways in degraded peatlands: New insights from radiocarbon measurements of peatland waters](#). *JGR Biogeosciences* 127:e2021JG006344.

Finlayson, C.M., G.T. Davies, D.E. Pritchard, N.C. Davidson, M.S. Fennessy, M. Simpson, and W.R. Moomaw. 2022. [Reframing the human-wetlands relationship through a Universal Declaration of the Rights of Wetlands](#). *Marine & Freshwater Research* 73:1278-1282.

Flores Llampazo, G., E.N. Honorio Coronado, J. del Aguila-Pasquel, C.J. Cordova Oroche, A. Díaz Narvez, J. Reyna Huaymacari, J. Grandez Ríos, I.T. Lawson, A. Hastie, A.J. Biard, and T.R. Baker. 2022. [The presence of peat and variation in tree species are under different hydrological controls in Amazonian wetland forests](#). *Hydrological Processes* 36:e14690.

France, J.L., M.F. Lunt, M. Andrade, and A.E. Jones. 2022. [Very large fluxes of methane measured above Bolivian seasonal wetlands](#). PNAS 119:e2206345119.

Grenfell, S., M. Grenfell, S. Tooth, A. Mehl, E. O’Gorman, T. Ralph, and W. Ellery. 2022. [Wetlands in drylands : Diverse perspectives for dynamic landscapes](#). Wetlands Ecology and Management 30:607-622.

Grzegorzczak, E., L. Bézier, K. Le-Rest, A. Caizergues, C. Francesiaz, J. Champagnon, M. Guillemain, and C. Eraud. 2022. [Is hunting nonintentionally selective? A test using game bird capture-dead recoveries](#). Ecology and Evolution 12:e9285.

Hathaway, J.M., C.J. Westbrook, R.C. Rooney, R.M. Petrone, and L.E. Langs. 2022. [Quantifying relative contributions of source waters from a subalpine wetland to downstream water bodies](#). Hydrological Processes 36:e14679.

Hodel, R.G.J., D.E. Soltis, and P.S. Soltis. 2022. [Hindcast-validated species distribution models reveal future vulnerabilities of mangroves and salt marsh species](#). Ecology and Evolution 12:e9252.

*Holgerson, M.A., R.A. Hovel, P.T. Kelly, L.E. Bortolotti, J.A. Brentrup, A.R. Bellamy, S.K. Oliver, and A.J. Reisinger. 2022. [Integrating ecosystem metabolism and consumer allochthony reveals nonlinear drivers in lake organic matter processing](#). Limnology and Oceanography 67:S71-S85.

*Holgerson, M.A., D.C. Richardson, J. Roith, L.E. Bortolotti, K. Finlay, D.J. Hornbach, K. Gurung, A. Ness, M.R. Andersen, S. Bansal, J.C. Finlay, J.A. Cianci-Gaskill, S. Hahn, B.D. Janke, C. McDonald, J.P. Mesman, R.L. North, C.O. Roberts, J.N. Sweetman, and J.R. Webb. 2022. [Classifying mixing regimes in ponds and shallow lakes](#). Water Resources Research 58:e2022WR032522.

Holmquist, J.R. and L. Windham-Myers. 2022. [A conterminous USA-scale map of relative tidal marsh elevation](#). Estuaries and Coasts 45:1596-1614.

Iram, N., D.T. Maher, C.E. Lovelock, T. Baker, C. Cadier, and M.F. Adame. 2022. [Climate change mitigation and improvement of water quality from the restoration of a subtropical coastal wetland](#). Ecological Applications 32:e2620.

Juutinen, S. 2022. [Summer matters for peatlands](#). Nature Climate Change 12:706-707.

Kee Lam, S., J.P. Goodrich, X. Liang, Y. Zhang, B. Pan, L.A. Schipper, Y. Sulaeman, L. Nelson, and D. Chen. 2022. [Mitigating soil greenhouse-gas emissions from land-use change in tropical peatlands](#). Frontiers in Ecology and Environment 20:352-360.

Kou, D., T. Virtanen, C.C. Treat, J.-P. Tuovinen, A. Räsänen, S. Juutinen, J. Mikola, M. Aurela, L. Heiskanen, M. Heikkilä, J. Weckström, T. Juselius, S.R. Piilo, J. Deng, Y. Zhang, N. Chaudhary, C. Huang, M. Välranta, C. Biasi, X. Liu, M. Guo, Q. Zhuang, A. Korhola, and N.J. Shurpali. 2022. [Peatland heterogeneity impacts on regional carbon flux and its radiative effect within a boreal landscape](#). JGR Biogeosciences 127:e2021JG006774.

*Kuechle, K.J., E.B. Webb, D. Mengel, and A.R. Main. 2022. [Seed treatments containing neonicotinoids and fungicides reduce aquatic insect richness and abundance in Midwestern USA-Managed floodplain wetlands](#). Environmental Science and Pollution Research 29:45261-45275.

Lyon, B.E., A. Carminati, G. Goggin, and J.M. Eadie. 2022. [Did extreme nest predation favor the evolution of obligate brood parasitism in a duck?](#) Ecology and Evolution 12:e9251.

Mittermayr, A., B. Legare, and M. Borrelli. 2022. [Applications of the Coastal and Marine Ecological Classification Standard \(CMECS\) in a partially restored New England salt marsh lagoon](#). Estuaries and Coasts 45:1095-1106.

Nyberg, M., T.A. Black, R. Ketler, S.-C. Lee, M. Johnson, M. Merkens, K.A. Nugent, and S.H. Knox. 2022. [Impacts of active versus passive re-wetting on the carbon balance of a previously drained bog](#). JGR Biogeosciences 127:e2022JG006881.

Ofori, V., K. Belcher, P. Lloyd-Smith, and P. Boxall. 2022. [Economic feasibility of a wetland certification program in the Canadian prairies](#). Smart Prosperity Institute Clean Economy, Ottawa, Ontario, Canada.

Paiha, A.P. and R.A. Laird. 2022. [Pace and shape of senescence in three species of duckweed](#). Ecology and Evolution 12:e9038.

Palumbo, M.D., S.A. Petrie, M.L. Schummer, B.D. Rubin, and J.F. Benson. 2022. [Influence of resource selection on nonbreeding season mortality of mallards](#). Journal of Wildlife Management 86:e22292.

Papas, P.J., D.S.L. Ramsey, J. Holmes, D. Frood, and S. Lyon. 2022. [Integrating data, expert opinion and fuzzy logic in the development of an index of wetland condition](#). Marine & Freshwater Research 73:1184-1195.

Pearse, A.T., M.J. Anteau, M. Post van der Burg, M.H. Sherfy, T.K. Buhl, and T.L. Shaffer. 2022. [Reassessing perennial cover as a driver of duck nest survival in the Prairie Pothole Region](#). Journal of Wildlife Management 86:e22227.

Peterson, S.H., J.T. Ackerman, M.P. Keating, C.R. Schacter, C.A. Hartman, M.L. Casazza, and M.P. Herzog. 2022. [Predator movements in relation to habitat features reveal vulnerability of duck nests to predation](#). *Ecology and Evolution* 12:e9329.

Pritchard, D. 2022. [The ‘ecological character’ of wetlands: A foundational concept in the Ramsar Convention, yet still cause for debate 50 years later](#). *Marine & Freshwater Science* 73:1127-1133.

Robichaud, C.D. and R.C. Rooney. 2022. [Invasive grass causes biotic homogenization in wetland birds in a Lake Erie coastal marsh](#). *Hydrobiologia* 849:3197-3212.

Saintilan, N., K.E. Kovalenko, G. Guntenspergen, K. Rogers, J.C. Lynch, D.R. Cahoon, C.E. Lovelock, D.A. Friess, E. Ashe, K.W. Krauss, N. Cormier, T. Spencer, J. Adams, J. Raw, C. Ibanez, F. Scarton, S. Temmerman, P. Meire, T. Maris, K. Thorne, J. Brazner, G.L. Chmura, T. Bowron, V.P. Gamage, K. Cressman, C. Endris, C. Marconi, P. Marcum, K. St. Laurent, W. Reay, K.B. Raposa, J.A. Garwood, and N. Khan. 2022. [Constraints on the adjustment of tidal marshes to accelerating sea level rise](#). *Science* 377:523-527.

Sanders-DeMott, R., M.J. Eagle, K.D. Kroeger, F. Wang, T.W. Brooks, J.A. O’Keefe Suttles, S.K. Nick, A.G. Mann, and J. Tang. 2022. [Impoundment increases methane emissions in Phragmites-invaded coastal wetlands](#). *Global Change Biology* 28:4539-4557.

Shahan, J., H. Chu, L. Windham-Myers, M. Matsumura, J. Carlin, E. Eichelmann, E. Stuart-Haentjens, B. Bergamaschi, K. Nakatsuka, and P. Oikawa. 2022. [Combining eddy covariance and chamber methods to better constrain CO₂ and CH₄ fluxes across a heterogeneous restored tidal wetlands](#). *JGR Biogeosciences* 127:e2022JG007112.

Smith, C.R., S.W. Golladay, C.L. Atkinson, and B.A. Clayton. 2022. [Litter breakdown among intermittently connected and unconnected geographically isolated wetlands: How nutrient inputs alter wetland function](#). *Wetlands* 42:57.

Smith, S.W., N. Estya Binte Rahman, M.E. Harrison, S. Shiodera, W. Giesen, M. Lampela, D.A. Wardle, K.Y. Chong, A. Randi, L.S. Wijedasa, P.Y. Teo, Y.A. Fatimah, N. Thian Teng, J.K.Q. Yeo, M.J. Alam, P. Bruges Sintes, T. Darusman, L.L.B. Graham, D. Refly Katoppo, K. Kojima, K. Kusin, D.P. Lestari, F. Metali, H.C. Morrogh-Bernard, M.B. Nahor, R.R.P. Napitupulu, D. Nasir, T. Kumar Nath, R. Nilus, M. Norisada, D. Rachmanadi, H.H. Rachmat, B. Ripoll Capilla, Salahuddin, P.B. Santosa, R.S. Sukri, B. Tay, W. Tuah, B.M.M. Wedeux, T. Yamanoshita, E.Y. Yokoyama, T.W. Yuwati, and J.S.H. Lee. 2022. [Tree species that ‘live slow, die older’ enhance tropical peat swamp restoration: Evidence from a systematic review](#). *Journal of Applied Ecology* 59:1950-1966.

Stiller, J.C., W.F. Siemer, K.A. Perkins, and A.K. Fuller. 2022. [Choosing an optimal duck season: Integrating hunter values and duck abundance](#). *Wildlife Society Bulletin* 46:e1313.

Stolt, M. and A. Hardy. 2022. [Carbon sequestration in back-barrier tidal marsh soils](#). Soil Science Society of America Journal 86:1368-1377.

Stroud, D.A. and N.C. Davidson. 2022. [Fifty years of criteria development for selecting wetlands of international importance](#). Marine & Freshwater Research 73:1134-1148.

Teitelbaum, C.S., J.T. Ackerman, M.A. Hill, J.M. Satter, M.L. Casazza, S.E.W. De La Cruz, W.M. Boyce, E.J. Buck, J.M. Eadie, M.P. Herzog, E.L. Matchett, C.T. Overton, S.H. Peterson, M. Plancarte, A.M. Ramey, J.D. Sullivan, and D.J. Prosser. 2022. [Avian influenza antibody prevalence increases with mercury contamination in wild waterfowl](#). Proceedings of the Royal Society B 289:rsob.2022.1312.

Temmerman, S., E.M. Horstman, K.W. Krauss, J.C. Mullarney, I. Pelckmans, and K. Schoutens. 2023. [Marshes and mangroves as nature-based coastal storm buffers](#). Annual Review of Marine Science 15:9.1-9.24.

Thompson, J.M., T.V. Riecke, B.L. Daniels, K.A. Spragens, M.L. Gabrielson, C.A. Nicolai, and B.S. Sedinger. 2022. [Survival and mortality of green-winged teal banded on the Yukon-Kuskokwim Delta, Alaska](#). Journal of Wildlife Management 86:e2223.

Tucker, C., A. O'Neill, K. Meingast, L. Bourgeau-Chavez, E. Lilleskov, and E.S. Kane. 2022. [Spectral indices of vegetation condition and soil water content reflects controls on CH₄ and CO₂ exchange in *Sphagnum*-dominated northern peatlands](#). JGR Biogeosciences 127:e2021JG006486.

van Dobben, H.F., A.V. de Groot, and J.P. Bakker. 2022. [Salt marsh accretion with and without deep soil subsidence as a proxy for sea-level rise](#). Estuaries and Coasts 45:1562-1582.

Wang, X., V. Prahalad, and J.B. Kirkpatrick. 2022. [Public perceptions of wetlands and preferences for on-site visitor facilities and communication media: A case study from an Australian Ramsar wetland](#). Marine & Freshwater Research 73:1149-1165.

Wardinski, K.M., E.R. Hotchkiss, C.N. Jones, D.L. McLaughlin, B.D. Straham, and D.T. Scott. 2022. [Water-soluble organic matter from soils at the terrestrial-aquatic interface in wetland-dominated landscapes](#). JGR Biogeosciences 127:e2022JG006994.

Williams-Jara, G.M., A. Espinoza-Tenorio, C. Monzón-Alvarado, G. Posada-Vanegas, and D. Infante-Mata. 2022. [Fires in coastal wetlands: A review of research trends and management opportunities](#). Wetlands 42:56.

Zlonis, E.J., R. Deo, and J.B. Berdeen. 2022. [LiDAR and multispectral imagery predict the occurrence of tree cavities suitable for a cavity-nesting duck](#). Remote Sensing in Ecology and Conservation 8:191-207.

Zou, J., A.D. Ziegler, D. Chen, G. McNicol, P. Ciais, X. Jiang, C. Zheng, J. Wu, Z. Lin, X. He, L.E. Brown, J. Holden, Z. Zhang, S.J. Ramchunder, A. Chen, and Z. Zheng. 2022. [Rewetting global wetlands effectively reduces major greenhouse gas emissions](#). *Nature Geoscience* 15:627-632.