

Stanford



Lisa Mandle

Lead scientist

Stanford Woods Institute for the Environment

Bio

BIO

Lisa Mandle (she/her) is Director of Science-Software Integration and a Lead Scientist with the Natural Capital Project. She works to make ecosystem service science accessible and actionable through NatCap's data and software, overseeing our software team. Her research sheds light on how land management and infrastructure development affect ecosystem services, social equity, and human health. Lisa works with governments, multi-lateral development banks, and non-governmental organizations to incorporate this understanding into policy and finance, particularly in Latin America and Asia. She is also lead editor of the book *Green Growth That Works*, which provides a practical guide to policy and finance mechanisms from around the world for securing benefits from nature.

ACADEMIC APPOINTMENTS

- Senior Research Scientist, Stanford Woods Institute for the Environment
- Academic Research Staff, Woods Research Natural Capital Project

PROFESSIONAL EDUCATION

- Ph.D., University of Hawaii Manoa , Botany (Ecology, Evolution and Conservation Biology)
- A.B./Sc.B., Brown University , Anthropology and Biology

Publications

PUBLICATIONS

- **Increasing decision relevance of ecosystem service science** *NATURE SUSTAINABILITY*
Mandle, L., Shields-Estrada, A., Chaplin-Kramer, R., Mitchell, M. E., Bremer, L. L., Gourevitch, J. D., Hawthorne, P., Johnson, J. A., Robinson, B. E., Smith, J. R., Sonter, L. J., Verutes, G. M., Vogl, et al
2020
- **Global modeling of nature's contributions to people.** *Science (New York, N.Y.)*
Chaplin-Kramer, R. n., Sharp, R. P., Weil, C. n., Bennett, E. M., Pascual, U. n., Arkema, K. K., Brauman, K. A., Bryant, B. P., Guerry, A. D., Haddad, N. M., Hamann, M. n., Hamel, P. n., Johnson, et al
2019; 366 (6462): 255–58
- **Assessing ecosystem service provision under climate change to support conservation and development planning in Myanmar.** *Plos one*
Mandle, L., Wolny, S., Bhagabati, N., Helsingin, H., Hamel, P., Bartlett, R., Dixon, A., Horton, R., Lesk, C., Manley, D., De Mel, M., Bader, D., Nay Won Myint, et al
2017; 12 (9): e0184951
- **Who loses? Tracking ecosystem service redistribution from road development and mitigation in the Peruvian Amazon** *FRONTIERS IN ECOLOGY AND THE ENVIRONMENT*
Mandle, L., Tallis, H., Sotomayor, L., Vogl, A. L.
2015; 13 (6): 309-315

- **Centring justice in conceptualizing and improving access to urban nature *PEOPLE AND NATURE***
Langhans, K. E., Echeverri, A., Daws, S., Moss, S. N., Anderson, C. B., Chaplin-Kramer, R., Hendershot, J., Liu, L., Mandle, L., Nguyen, O., Ou, S. X., Remme, R. P., Schmitt, et al
2023
- **Colombian biodiversity is governed by a rich and diverse policy mix. *Nature ecology & evolution***
Echeverri, A., Furumo, P. R., Moss, S., Figot Kuthy, A. G., Garcia Aguirre, D., Mandle, L., Valencia, I. D., Ruckelshaus, M., Daily, G. C., Lambin, E. F.
2023
- **Reducing seed predation by introduced rodents helps, but is insufficient, to prevent long-term decline of common forest trees *BIOLOGICAL CONSERVATION***
Ticktin, T., Mandle, L., Hastings, Z., Hoppe, T., Trauernicht, C.
2023; 278
- **Global Change and Emerging Infectious Diseases. *Annual review of resource economics***
Nova, N., Athni, T. S., Childs, M. L., Mandle, L., Mordecai, E. A.
2022; 14: 333-354
- **Evidence gaps and diversity among potential win-win solutions for conservation and human infectious disease control *LANCET PLANETARY HEALTH***
Hopkins, S. R., Lafferty, K. D., Wood, C. L., Olson, S. H., Buck, J. C., De Leo, G. A., Fiorella, K. J., Fomberg, J. L., Gachitoren, A., Jones, I. J., Kuris, A. M., Kwong, L. H., LeBoa, et al
2022; 6 (8): E694-E705
- **Evidence gaps and diversity among potential win-win solutions for conservation and human infectious disease control. *The Lancet. Planetary health***
Hopkins, S. R., Lafferty, K. D., Wood, C. L., Olson, S. H., Buck, J. C., De Leo, G. A., Fiorella, K. J., Fornberg, J. L., Gachitoren, A., Jones, I. J., Kuris, A. M., Kwong, L. H., LeBoa, et al
2022; 6 (8): e694-e705
- **Deep Learning Segmentation of Satellite Imagery Identifies Aquatic Vegetation Associated with Snail Intermediate Hosts of Schistosomiasis in Senegal, Africa *REMOTE SENSING***
Liu, Z., Chamberlin, A. J., Tallam, K., Jones, I. J., Lamore, L. L., Bauer, J., Bresciani, M., Wolfe, C. M., Casagrandi, R., Mari, L., Gatto, M., Diongue, A., Toure, et al
2022; 14 (6)
- **Global Change and Emerging Infectious Diseases *ANNUAL REVIEW OF RESOURCE ECONOMICS***
Nova, N., Athni, T. S., Childs, M. L., Mandle, L., Mordecai, E. A.
2022; 14: 333-354
- **Prioritizing actions: spatial action maps for conservation. *Annals of the New York Academy of Sciences***
Tallis, H., Fargione, J., Game, E., McDonald, R., Baumgarten, L., Bhagabati, N., Cortez, R., Griscom, B., Higgins, J., Kennedy, C. M., Kiesecker, J., Kroeger, T., Leberer, et al
2021
- **An ecosystem service perspective on urban nature, physical activity, and health. *Proceedings of the National Academy of Sciences of the United States of America***
Remme, R. P., Frumkin, H., Guerry, A. D., King, A. C., Mandle, L., Sarabu, C., Bratman, G. N., Giles-Corti, B., Hamel, P., Han, B., Hicks, J. L., James, P., Lawler, et al
2021; 118 (22)
- **Human-mediated impacts on biodiversity and the consequences for zoonotic disease spillover. *Current biology : CB***
Glidden, C. K., Nova, N., Kain, M. P., Lagerstrom, K. M., Skinner, E. B., Mandle, L., Sokolow, S. H., Plowright, R. K., Dirzo, R., De Leo, G. A., Mordecai, E. A.
2021; 31 (19): R1342-R1361
- **Creating a space for place and multidimensional well-being: lessons learned from localizing the SDGs *SUSTAINABILITY SCIENCE***
Sterling, E. J., Pascua, P., Sigouin, A., Gazit, N., Mandle, L., Betley, E., Aini, J., Albert, S., Caillon, S., Caselle, J. E., Cheng, S. H., Claudet, J., Dacks, et al
2020
- **Restoring to the future: Environmental, cultural, and management trade-offs in historical versus hybrid restoration of a highly modified ecosystem *CONSERVATION LETTERS***
Burnett, K. M., Ticktin, T., Bremer, L. L., Quazi, S. A., Geslani, C., Wada, C. A., Kurashima, N., Mandle, L., Pascua, P., Depraetere, T., Wolkis, D., Edmonds, M., Giambelluca, et al

2019; 12 (1)

● **Look beyond peer-reviewed literature and traditional validation when assessing ecosystem services modeling efforts: A response to Ochoa and Urbina-Cardona's review *ECOSYSTEM SERVICES***

Bryant, B. P., Hamel, P., Mandle, L.

2018; 30: 1–2

● **Distilling the role of ecosystem services in the Sustainable Development Goals *ECOSYSTEM SERVICES***

Wood, S. R., Jones, S. K., Johnson, J. A., Brauman, K. A., Chaplin-Kramer, R., Fremier, A., Girvetz, E., Gordon, L. J., Kappel, C. V., Mandle, L., Mulligan, M., O'Farrell, P., Smith, et al

2018; 29: 70–82

● **Bringing multiple values to the table: assessing future land-use and climate change in North Kona, Hawai'i *ECOLOGY AND SOCIETY***

Bremer, L. L., Mandle, L., Trauernicht, C., Pascua, P., McMillen, H. L., Burnett, K., Wada, C. A., Kurashima, N., Quazi, S. A., Giambellucca, T., Chock, P., Ticktin, T.

2018; 23 (1)

● **Incorporating climate change into ecosystem service assessments and decisions: a review *GLOBAL CHANGE BIOLOGY***

Runting, R. K., Bryan, B. A., Dee, L. E., Maseyk, F. J., Mandle, L., Hamel, P., Wilson, K. A., Yetka, K., Possingham, H. P., Rhodes, J. R.

2017; 23 (1): 28–41

● **OPAL: An open-source software tool for integrating biodiversity and ecosystem services into impact assessment and mitigation decisions *ENVIRONMENTAL MODELLING & SOFTWARE***

Mandle, L., Douglass, J., Lozano, J. S., Sharp, R. P., Vogl, A. L., Denu, D., Walschburger, T., Tanis, H.

2016; 84: 121–133

● **Entry Points for Considering Ecosystem Services within Infrastructure Planning: How to Integrate Conservation with Development in Order to Aid Them Both *CONSERVATION LETTERS***

Mandle, L., Bryant, B. P., Ruckelshaus, M., Geneletti, D., Kiesecker, J. M., Pfaff, A.

2016; 9 (3): 221–227

● **Model development for the assessment of terrestrial and aquatic habitat quality in conservation planning *SCIENCE OF THE TOTAL ENVIRONMENT***

Terrado, M., Sabater, S., Chaplin-Kramer, B., Mandle, L., Ziv, G., Acuna, V.

2016; 540: 63–70

● **Degradation in carbon stocks near tropical forest edges. *Nature communications***

Chaplin-Kramer, R., Ramler, I., Sharp, R., Haddad, N. M., Gerber, J. S., West, P. C., Mandle, L., Engstrom, P., Baccini, A., Sim, S., Mueller, C., King, H.

2015; 6: 10158

● **Degradation in carbon stocks near tropical forest edges *NATURE COMMUNICATIONS***

Chaplin-Kramer, R., Ramler, I., Sharp, R., Haddad, N. M., Gerber, J. S., West, P. C., Mandle, L., Engstrom, P., Baccini, A., Sim, S., Mueller, C., King, H.

2015; 6

● **Moderate land use changes plant functional composition without loss of functional diversity in India's Western Ghats *ECOLOGICAL APPLICATIONS***

Mandle, L., Ticktin, T.

2015; 25 (6): 1711–1724

● **Resilience of palm populations to disturbance is determined by interactive effects of fire, herbivory and harvest *JOURNAL OF ECOLOGY***

Mandle, L., Ticktin, T., Zuidema, P. A.

2015; 103 (4): 1032–1043

● **Spatial patterns of agricultural expansion determine impacts on biodiversity and carbon storage *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA***

Chaplin-Kramer, R., Sharp, R. P., Mandle, L., Sim, S., Johnson, J., Butnar, I., Mila I Canals, L., Eichelberger, B. A., Ramler, I., Mueller, C., McLachlan, N., Yousefi, A., King, et al

2015; 112 (24): 7402–7407

● **Assessing the Effects of Multiple Stressors on the Recruitment of Fruit Harvested Trees in a Tropical Dry Forest, Western Ghats, India *PLOS ONE***

Varghese, A., Ticktin, T., Mandle, L., Nath, S.

2015; 10 (3)

- **Assessing the effects of multiple stressors on the recruitment of fruit harvested trees in a tropical dry forest, Western Ghats, India.** *PLoS one*
Varghese, A., Ticktin, T., Mandle, L., Nath, S.
2015; 10 (3)
- **High frequency of premature termination mutations in the factor V gene: Three factor V deficiency case reports and a mutation review THROMBOSIS AND HAEMOSTASIS**
Schrijver, I., Hong, D. W., Mandle, L., Jones, C. D., DiMichele, D., Monahan, P. E., Zehnder, J. L.
2005; 93 (3): 610-611