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Unravelling foreshore ecosystem dynamics

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List of publications

PUBLISHED PAPERS

Marin-Diaz, B., Govers, L. L., van der Wal, D., Olf, H., & Bouma, T. J. (2022). The importance of marshes providing soil stabilization to resist fast-flow erosion in case of a dike breach. *Ecological Applications*, e2622. <https://doi.org/10.1002/eap.2622>

Temmink, R.J.M., Fivash, G.S., Govers, L. L., Nauta J., **Marin-Diaz, B.**, Crujisen, P.P.M.J.M., Reijers V.C., Didderen, K., Penning, E., Olf, H., Heusinkveld, J.H.T., Lamers L.P.M., Lengkeek, W., Christianen, M.J.A., Bouma, T. J. & van der Heide, T., (2022). Initiating and upscaling mussel reef establishment with life cycle informed restoration: Successes and future challenges. *Ecological Engineering*, 175, 106496. <https://doi.org/10.1016/j.ecoleng.2021.106496>

Marin-Diaz, B., Fivash, G.S., Nauta J., Temmink, R.J.M., Hijner N., Reijers V.C., Crujisen, P.P.M.J.M., Didderen, K., Heusinkveld, J.H.T., Penning, E., Maldonado-Garcia, G., van Belzen, J., Christianen, M.J.A., van der Heide, T., Daphne van der Wal, D., Olf, H., Bouma, T. J. & Govers, L. L. (2021). On the use of large-scale biodegradable artificial reefs for intertidal foreshore stabilization. *Ecological Engineering*, 170, 106354. <https://doi.org/10.1016/j.ecoleng.2021.106354>

Marin-Diaz, B., Govers, L. L., van der Wal, D., Olf, H., & Bouma, T. J. (2021). How grazing management can maximize erosion resistance of salt marshes. *Journal of Applied Ecology*, 58(7), 1533-1544. <https://doi.org/10.1111/1365-2664.13888>

Marin-Diaz, B., Bouma, T. J., & Infantes, E. (2019). Role of eelgrass on bed-load transport and sediment resuspension under oscillatory flow. *Limnology and Oceanography*, (2), 426–436. <https://doi.org/10.1002/lno.11312>

SUBMITTED PAPERS

Marin-Diaz, B., Daphne van der Wal, Leon Kaptein, Pol Martinez-Garcia, Christopher H. Lashley, Kornelis de Jong, Jan Willem Nieuwenhuis, Laura L. Govers, Han Olf, Tjeerd J. Bouma (under review). Using salt marshes for coastal protection: effective but hard to get where most needed.

PENDING SUBMISSION

Marin-Diaz, B., Reijers, V. C., Meijers, L., van der Wal, D., Olf, H., Bouma, T. J. & Govers, L. L. (in prep.). Quantifying the resistance to cliff and sheet erosion across vegetation zones on a sandy back-barrier island

Nauta J., Christianen, M.J.A., Temmink, R.J.M., Fivash, G.S., **Marin-Diaz, B.**, Reijers V.C., Penning, E., Borst, A., Didderen, K., Heusinkveld, J.H.T., Zwarts, M., Crujisen, P.P.M.J.M., Hijner, N., Lengkeek, W., Lamers L.P.M., van der Heide, T., Bouma, T. J., van der Wal, D., Olf, H., Govers, L. L. (in prep.). Enhanced food web complexity and biodiversity through artificial reefs in an intertidal soft-sediment ecosystem

NON PEER-REVIEWED REPORTS

Habitat-overstijgende interacties in het Waddengebied. Govers, L., Reijers, V., Smeele, Q., Olf, H., van der Zee, E., Temmink, R., **Marin Diaz, B.**, Fivash, G., Nauta, J. & van der Heide, T., 2021, Driebergen: VBNE, Vereniging van Bos- en Natuurterreineigenaren. 52 p.

CONFERENCE PRESENTATIONS

Marin-Diaz, B., Fivash, G.S., Nauta J., Temmink, R.J.M., Hijner N., Reijers V.C., Crujisen, P.P.M.J.M., Didderen, K., Heusinkveld, J.H.T., Penning, E., Maldonado-Garcia, G., van Belzen, J., Christianen, M.J.A., van der Heide, T., Daphne van der Wal, D., Olf, H., Bouma, T. J. & Govers, L. L. On the use of large-scale biodegradable artificial reefs for intertidal foreshore stabilization. 9th World Conference on Ecological Restoration (SER), 2021, Canada (online due to covid-19)

Marin-Diaz, B., Govers, L. L., van der Wal, D., Infantes, E., Olf, H., & Bouma, T. J. Unravelling foreshore ecosystem dynamics: applications for ecosystem-based coastal defence. 6th International EcoSummit Congress: Building a sustainable and desirable future: Adapting to a changing land and sea-scape, 2021, Australia (online due to covid-19)

Marin-Diaz, B., Govers, L. L., van der Wal, D., Infantes, E., Olf, H., & Bouma, T. J. Unravelling foreshore ecosystem dynamics: applications for ecosystem-based coastal defence. Netherlands Annual Ecology Meeting (NAEM), 2020, the Netherlands (1st prize oral presentation)

Marin-Diaz, B., Govers, L. L., van der Wal, D., Olf, H., & Bouma, T. J. Saltmarsh elevation, age and grazing as predictors for cliff erosion. Coastal Ecology Workshop, Wales, 2018.

POSTER PRESENTATIONS

Marin-Diaz, B., Govers, L. L., van der Wal, D., Infantes, E., Olf, H., & Bouma, T. J. Unravelling foreshore ecosystem dynamics: applications for ecosystem-based coastal defence. Netherlands Annual Ecology Meeting (NAEM), 2019 and LIFE Congress, The Netherlands, 2019

Marin-Diaz, B., Govers, L. L., van der Wal, D., Olf, H., & Bouma, T. J. How to manage foreshore ecosystems to gain both coastal protection and ecological value?. Netherlands Annual Ecology Meeting (NAEM), 2018.

ORGANIZATION OF SEMINARS

"Forelands: useful for flood risk management or just beautiful nature?", as part of the All-Risk Webinar series, including an oral presentation (29th June 2021, The Netherlands)

