

Pablo Almaraz

THEORETICAL ECOLOGIST · APPLIED MATHEMATICIAN · OCEANOGRAPHER · EPISTEMOLOGIST · PHENOMENOLOGIST

Robust Ecologies Lab, Spain

✉ pablo.almaraz@csic.es | ☎ 0000-0003-1416-2695 | 🎓 Pablo Almaraz | 🏠 robustecologies.github.io | 📷 palmaraz

Exploring how transiency begets persistence

Education

Universidad de Cádiz

B.Sc. IN MARINE SCIENCES

Puerto Real, Spain

Oct. 2012 - Jun. 2016

- **GPA: 8.88 out of 10**
- B.Sc. Thesis: *Global pattern of diversity and stability in marine phytoplankton communities*

UCA-UGR-UMA-UAL-UJA

M.Sc. IN MATHEMATICS

Puerto Real, Spain

Oct. 2016 - Jun. 2017

- **GPA: 9.03 out of 10**
- M.Sc. Thesis: *Liapunov and structural stability in inverse evolution problems*

Spanish National Research Council

PH. D. IN MARINE SCIENCES AND TECHNOLOGIES

Puerto Real, Spain

Jan. 2017 - Feb. 2023

- **Summa Cum Laude**
- Ph. D. Thesis: *Diversity, variability and persistence: elements for a non-equilibrium theory of eco-evolutionary dynamics*

Honors & Awards

2016 **1st in Class, highest GPA**, B.Sc. in Marine Sciences

Universidad de

Cádiz

2017 **Special Prize**, Certamen Universitario Arquímedes

Spanish Ministry of
Education

Skills

Programming LaTeX, R, Python, Julia, Octave

Languages Spanish, English, French

Publications

PEER-REVIEWED

1. Roca, M., Peixoto-Dias, C.E., Horta, P., **Almaraz**, P., Heredia, S., Caballero, I., Navarro, G., Fonseca, A.D., (2025). Massive wastewater discharge severely impacts a whole eutrophic coastal lagoon ecosystem. *Marine Pollution Bulletin* 221: 118532. doi:https://doi.org/10.1016/j.marpolbul.2025.118532
2. Dornelas, M., Antão, L. H., Bates, A. E., Brambilla, V., Chase, J. M., Chow, C. F. Y., Fontrodona-Eslava, A., Magurran, A. E., Martins, I. S., Moyes, F., Sagouis, A., Adu-Acheampong, S., Acquah-Lamprey, D., Adam, D., Ajani, P. A., Albaina, A., **Almaraz**, P. et al. (2025) BioTIME 2.0: Expanding and Improving a Database of Biodiversity Time Series. *Global Ecology and Biogeography* 34: e70003. doi:https://doi.org/10.1111/geb.70003
3. **Almaraz**, P., Kalita, P., Langa, José A., Soler-Toscano, F. (2024) Structural stability of invasion graphs for Lotka–Volterra systems. *Journal of Mathematical Biology* 88: 64. doi:https://doi.org/10.1007/s00285-024-02087-8
4. **Almaraz**, P., Green, Andy J. (2024) Catastrophic bifurcation in the dynamics of a threatened bird community triggered by a planetary-scale environmental perturbation. *Biological Conservation* 291: 110466. doi:https://doi.org/10.1016/j.biocon.2024.110466
5. **Almaraz**, P., Martínez, F., Morales-Reyes, Z., Sánchez-Zapata, J.A., Blanco, G., (2022). Long-term demographic dynamics of a keystone scavenger disrupted by human-induced shifts in food availability. *Ecological Applications* 32, e2579. doi:https://doi.org/10.1002/eap.2579
6. Navarro G, **Almaraz** P, Caballero I, Vázquez Á, Huertas IE. (2017) Reproduction of Spatio-Temporal Patterns of Major Mediterranean Phytoplankton Groups from Remote Sensing OC-CCI Data. *Frontiers in Marine Science*, 4:246. doi:https://doi.org/10.3389/fmars.2017.00246

7. Herrero A, **Almaraz** P, Zamora R, Castro J, Hódar JA. (2016) From the individual to the landscape and back: time-varying effects of climate and herbivory on tree sapling growth at distribution limits. *Journal of Ecology*, 104:430-442. doi:<https://doi.org/10.1111/1365-2745.12527>
8. **Almaraz**, P., (2015). Bordeaux wine quality and climate fluctuations during the last century: changing temperatures and changing industry. *Climate Research* 64, 187–199. doi:<https://doi.org/10.3354/cr01314>
9. **Almaraz**, P., (2014). Simple models, complex models, useful models: can we tell them from the flap of a butterfly's wings? *Frontiers in Ecology and Evolution* 2, 54. doi:<https://doi.org/10.3389/fevo.2014.00054>
10. Rubio, M.D., Ildefonso, N., Agüera, E.I., **Almaraz**, P., De Miguel, R.J., Escribano, B.M., (2014). Plasma biochemistry and haematology of crested coots (*Fulica cristata*) and common coots (*Fulica atra*) from Spain. *Comparative Clinical Pathology* 23, 385–391. doi:<https://doi.org/10.1007/s00580-012-1629-9>
11. Moleón, M., **Almaraz**, P., Sánchez-Zapata, J.A., (2013). Inferring ecological mechanisms from hunting bag data in wildlife management: a reply to Blanco-Aguilar et al. (2012). *European Journal of Wildlife Research* 59, 599–608. doi:<https://doi.org/10.1007/s10344-013-0711-1>
12. **Almaraz**, P., Green, A.J., Aguilera, E., Rendón, M.A., Bustamante, J., (2012). Estimating partial observability and nonlinear climate effects on stochastic community dynamics of migratory waterfowl. *Journal of Animal Ecology* 81, 1113–1125. doi:<https://doi.org/10.1111/j.1365-2656.2012.01972.x>
13. **Almaraz**, P., Oro, D., (2011). Size-mediated non-trophic interactions and stochastic predation drive assembly and dynamics in a seabird community. *Ecology* 92, 1948–1958. doi:<https://doi.org/10.1890/11-0181.1>
14. Cortés-Avizanda, A., **Almaraz**, P., Carrete, M., Sánchez-Zapata, J.A., Delgado, A., Hiraldo, F., Donázar, J.A., (2011). Spatial Heterogeneity in Resource Distribution Promotes Facultative Sociality in Two Trans-Saharan Migratory Birds. *PLoS ONE* 6, e21016. doi:<https://doi.org/10.1371/journal.pone.0021016>
15. Moleón, M., **Almaraz**, P., Sánchez-Zapata, J.A., (2008). An Emerging Infectious Disease Triggering Large-Scale Hyperpredation. *PLoS ONE* 3, e2307. doi:<https://doi.org/10.1371/journal.pone.0002307>
16. Rendón, M.A., Green, A.J., Aguilera, E., **Almaraz**, P., (2008). Status, distribution and long-term changes in the waterbird community wintering in Doñana, south-west Spain. *Biological Conservation* 141, 1371–1388. doi:<https://doi.org/10.1016/j.biocon.2008.03.006>
17. **Almaraz**, P., (2005). Ecological time-series analysis through structural modelling with latent constructs: concepts, methods and applications. *Comptes Rendus Biologies* 328, 301–316. doi:<https://doi.org/10.1016/j.crv.2004.12.005>
18. **Almaraz**, P., Amat, J.A., (2004). Multi-annual spatial and numeric dynamics of the white-headed duck *Oxyura leucocephala* in southern Europe: seasonality, density dependence and climatic variability. *Journal of Animal Ecology* 73, 1013–1023. doi:<https://doi.org/10.1111/j.0021-8790.2004.00873.x>
19. **Almaraz**, P., Amat, J.A., (2004). Complex structural effects of two hemispheric climatic oscillators on the regional spatio-temporal expansion of a threatened bird. *Ecology Letters* 7, 547–556. doi:<https://doi.org/10.1111/j.1461-0248.2004.00612.x>