



# Prof. Nazlı DEMİREL EROL

## Personal Information

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Vefa 34134 Fatih İstanbul

## International Researcher IDs

ScholarID: Foyhxq0AAAAJ

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Publons / Web Of Science ResearcherID: H-5679-2012

ScopusID: 55427203800

Yoksis Researcher ID: 36029



## Biography

I am a marine biologist with a focus on fisheries conservation and the ecosystem approach to fisheries. I got my PhD in marine biology from Istanbul University in 2010 and later gained experience in fisheries conservation, working closely with Dr. Rainer Froese on data-limited stock assessment methods. With 20 years of experience, I have contributed as a project coordinator, consultant, and expert to various fisheries management and ecosystem conservation projects both nationally and internationally. Since 2015, I have been a senior researcher at the Institute of Marine Sciences and Management at Istanbul University. My work primarily explores the state of marine ecosystems and fisheries resources in the Eastern Mediterranean, particularly under the influence of environmental stressors.

My current researches focus on estimating reference points using multiple tools for best management practices of data-limited fish stocks. I am particularly interested in ecosystem approach to fisheries management by using different models to determine status of ecosystem and fisheries resources. First, I use fisheries biology to better understand life history and ecological roles of commercial species, and second, I employ relationships with environmental conditions and ecosystem changes to identify indicators and reference points for fisheries.

## Education Information

2004 - 2010	Doctorate, Istanbul University, Deniz Bilimleri ve İşletmeciliği Enstitüsü, Deniz Bilimleri ve İşletmeciliği Bölümü, Turkey
2001 - 2004	Postgraduate, Istanbul University, Deniz Bilimleri ve İşletmeciliği Enstitüsü, Deniz Bilimleri ve İşletmeciliği Bölümü, Turkey
1997 - 2001	Undergraduate, Istanbul University, Su Ürünleri Fakültesi, Turkey

## Research Areas

Fisheries, Marine Biology, Biological Oceanography

## Academic Titles / Tasks

2022 - Continues	Professor, Istanbul University, Deniz Bilimleri ve İşletmeciliği Enstitüsü, Deniz Bilimleri ve İşletmeciliği Bölümü
2016 - 2022	Associate Professor, Istanbul University, Deniz Bilimleri ve İşletmeciliği Enstitüsü, Deniz Bilimleri ve İşletmeciliği Bölümü
2013 - 2015	Researcher, GEOMAR Helmholtz Centre for Ocean Research Kiel, Evolutionary Ecology of Fishes
2010 - 2013	Research Assistant PhD, Istanbul University, Deniz Bilimleri Ve İşletmeciliği Enstitüsü, Deniz Bilimleri Ve İşletmeciliği Bölümü
2001 - 2010	Research Assistant, Istanbul University, Deniz Bilimleri ve İşletmeciliği Enstitüsü, Deniz Bilimleri ve İşletmeciliği Bölümü

## Courses

2023 - 2024, 2022 - 2023, 2020 - 2021, 2018 - 2019	Sayısal Ekoloji, Postgraduate
2021 - 2022, 2019 - 2020, 2017 - 2018, 2016 - 2017	Balık Biyoçeşitliliği, Doctorate

## Advising Theses

Continues	Demirel N., Doctorate, D.Bedikoğlu(Student), Seasonal vertical distribution and impact of climate change on size variations of zooplankton in the Sea of Marmara
2020	Demirel N., Postgraduate, D.Bedikoğlu(Student), Reproduction strategy of dominant Cladocera species of the Sea of Marmara
2020	Demirel N., Doctorate, G.Gül(Student), Feeding habits and trophic levels of elasmobranch species in the Sea of Marmara

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Assessment of Human Health Impacts from Invasive Pufferfish (Attacks, Poisonings and Fatalities) across the Eastern Mediterranean**  
Ulman A., Abd Rabou A. F. N., Al Mabruk S., Bariche M., Bilecenoğlu M., Demirel N., Galil B., Hüseyinoğlu M. F., Jimenez C., Hadjioannou L., et al.  
Biology, vol.13, no.4, pp.1-19, 2024 (SCI-Expanded)
- II. **Shifts in the pelagic fishery dynamics in response to regional sea warming and fishing in the Northeastern Mediterranean**  
Demirel N., Akoğlu E., Yıldız T.  
Regional Environmental Change, vol.23, no.4, 2023 (SCI-Expanded)
- III. **New developments in the analysis of catch time series as the basis for fish stock assessments: The CMSY++ method**  
Froese R., Winker H., Coro G., Palomares M. D., Tsikliras A., Dimarchopoulou D., Touloumis K., Demirel N., Vianna G., Scarcella G., et al.  
ACTA ICHTHYOLOGICA ET PISCATORIA, vol.53, pp.173-189, 2023 (SCI-Expanded)
- IV. **Occurrence, bioconcentration, and human health risks of pharmaceuticals in biota in the Sea of Marmara, Türkiye**  
Korkmaz N., Caglar N., Aksu A., Ünsal Özgüvenç T., Balcioglu E. B., Cavus Arslan H., Demirel N.  
CHEMOSPHERE, vol.325, 2023 (SCI-Expanded)

- V. **Editorial: Fishing effort and the evolving nature of its efficiency**  
Demirel N., Nauen C. E., Palomares M. L. D.  
FRONTIERS IN MARINE SCIENCE, vol.10, pp.5-8, 2023 (SCI-Expanded)
- VI. **Comparison of fish prey contribution in the diet of European hake by visual assessment of stomach contents and DNA metabarcoding**  
Gül G., Keskin E., Demirel N.  
Environmental Biology of Fishes, vol.106, no.4, pp.613-625, 2023 (SCI-Expanded)
- VII. **Fisheries impact on the Sea of Marmara ecosystem structure and functioning during the last three decades**  
Saygu I., Akoglu E., Gül G., Bedikoğlu D., Demirel N.  
Frontiers in Marine Science, vol.9, 2023 (SCI-Expanded)
- VIII. **Bio-economic indicators of fisheries: impact of variations in landings and fish size on market prices in Istanbul Fish Market**  
Yildiz T., Ulman A., Karakulak F. S., Uzer U., Demirel N.  
PEERJ, vol.11, 2023 (SCI-Expanded)
- IX. **A biological and ecological study of the invasive pufferfish *Torquigener hypselogeneion* (Bleeker 1852) [conspecific *Torquigener flavimaculosus* Hardy & Randall, 1983] in the Eastern Mediterranean**  
Ulman A., Akbora H. D., Çanak Ö., Chu E., Çiçek B. A., Ersönmez H., Mavruk S., Özyurt C. E., Yıldiz T., Liu A., et al.  
AQUATIC INVASIONS, vol.18, no.1, pp.59-81, 2023 (SCI-Expanded)
- X. **Uncovering ecological regime shifts in the Sea of Marmara and reconsidering management strategies**  
Demirel N., Akoglu E., Ulman A., Ertor-Akyazi P., Gül G., Bedikoğlu D., Yıldız T., Yilmaz I. N.  
MARINE ENVIRONMENTAL RESEARCH, vol.183, pp.1-13, 2023 (SCI-Expanded)
- XI. **Ontogenetic shift in diet and trophic role of *Raja clavata* inferred by stable isotopes and stomach content analysis in the Sea of Marmara**  
Gul G., Demirel N.  
JOURNAL OF FISH BIOLOGY, vol.101, no.3, pp.560-572, 2022 (SCI-Expanded)
- XII. **The occurrence and feeding of a critically endangered shark species, *Oxynotus centrina* in the Sea of Marmara**  
Gul G., Yokes M. B., Demirel N.  
JOURNAL OF FISH BIOLOGY, vol.101, no.3, pp.728-735, 2022 (SCI-Expanded)
- XIII. **Reproductive strategies and population characteristics of key Cladocera species in the Sea of Marmara**  
Bedikoğlu D., Yilmaz I. N., Demirel N.  
REGIONAL STUDIES IN MARINE SCIENCE, vol.54, pp.1-7, 2022 (SCI-Expanded)
- XIV. **Catch of the day: Abundance and size data of groupers (*Epinephelidae*) and combers (*Serranidae*) from Middle to Late Holocene Levantine archaeological contexts**  
Winter R., Desiderà E., Guidetti P., Vermeersch S., Demirel N., Çakırlar C.  
Journal of Island and Coastal Archaeology, 2022 (AHCI)
- XV. **A moving target: Achieving good environmental status and social justice in the case of an alien species, *Rapa whelk* in the Black Sea**  
Demirel N., Ulman A., Yıldiz T., Ertor-Akyazi P.  
MARINE POLICY, vol.132, 2021 (SSCI)
- XVI. **The biology and ecology of the invasive silver-cheeked toadfish (*Lagocephalus sceleratus*), with emphasis on the Eastern Mediterranean**  
Ulman A., Yıldiz T., Demirel N., Çanak Ö., Yemişken E., Pauly D.  
NEOBOTA, vol.68, pp.145-175, 2021 (SCI-Expanded)
- XVII. **Evaluation of the comprehensive feeding strategy and trophic role of overexploited mesopredator species in the Sea of Marmara (northeastern Mediterranean)**  
Gul G., Demirel N.  
ESTUARINE COASTAL AND SHELF SCIENCE, vol.259, 2021 (SCI-Expanded)

- XVIII. **Low Pufferfish and Lionfish Predation in Their Native and Invaded Ranges Suggests Human Control Mechanisms May Be Necessary to Control Their Mediterranean Abundances**  
Ulman A., Harris H. E. E., Doumpas N., Deniz Akbora H., Al Mabruk S. A. A., Azzurro E., Bariche M., Cicek B. A., Deidun A., Demirel N., et al.  
FRONTIERS IN MARINE SCIENCE, vol.8, 2021 (SCI-Expanded)
- XIX. **Stock dynamics and predator-prey effects of Atlantic bonito and bluefish as top predators in the Black Sea**  
Daskalov G. M., Demirel N., Ulman A., Georgieva Y., Zengin M.  
ICES JOURNAL OF MARINE SCIENCE, vol.77, no.7-8, pp.2995-3005, 2020 (SCI-Expanded)
- XX. **A comparison of market landings during fish spawning seasons to better understand the effectiveness of the temporal fishery closure in Turkey**  
Yıldız T., Ulman A., Demirel N.  
OCEAN & COASTAL MANAGEMENT, vol.198, 2020 (SCI-Expanded)
- XXI. **The Lost Fish of Turkey: A Recent History of Disappeared Species and Commercial Fishery Extinctions for the Turkish Marmara and Black Seas**  
Ulman A., Zengin M., Demirel N., Pauly D.  
FRONTIERS IN MARINE SCIENCE, vol.7, 2020 (SCI-Expanded)
- XXII. **Estimating stock status from relative abundance and resilience**  
Froese R., Winker H., Coro G., Demirel N., Tsikliras A. C., Dimarchopoulou D., Scarcella G., Palomares M. L. D., Dureuil M., Pauly D.  
ICES Journal of Marine Science, vol.77, pp.527-538, 2020 (SCI-Expanded)
- XXIII. **First Large-Scale Eastern Mediterranean and Black Sea Stock Assessment Reveals a Dramatic Decline**  
Demirel N., Zengin M., Ulman A.  
Frontiers in Marine Science, vol.7, 2020 (SCI-Expanded)
- XXIV. **On the pile-up effect and priors for L-inf and M/K: response to a comment by Hordyk et al. on "A new approach for estimating stock status from length frequency data" Reply**  
Froese R., Winker H., Coro G., Demirel N., Tsikliras A. C., Dimarchopoulou D., Scarcella G., Probst W. N., Dureuil M., Pauly D.  
ICES JOURNAL OF MARINE SCIENCE, vol.76, pp.461-465, 2019 (SCI-Expanded)
- XXV. **Status and rebuilding of European fisheries**  
Froese R., Winker H., Coro G., Demirel N., Tsikliras A. C., Dimarchopoulou D., Scarcella G., Quaas M., Matz-Lueck N.  
MARINE POLICY, vol.93, pp.159-170, 2018 (SSCI)
- XXVI. **A new approach for estimating stock status from length frequency data**  
Froese R., Winker H., Coro G., Demirel N., Tsikliras A. C., Dimarchopoulou D., Scarcella G., Probst W. N., Dureuil M., Pauly D.  
ICES Journal of Marine Science, vol.75, pp.2004-2015, 2018 (SCI-Expanded)
- XXVII. **Estimating fisheries reference points from catch and resilience**  
Froese R., Demirel N., Coro G., Kleisner K. M., Winker H.  
FISH AND FISHERIES, vol.18, pp.506-526, 2017 (SCI-Expanded)
- XXVIII. **Reply to Andersen et al. (2016) "Assumptions behind size-based ecosystem models are realistic"**  
Froese R., Walters C., Pauly D., Winker H., Weyl O. L. F., Demirel N., Tsikliras A. C., Holt S. J.  
ICES JOURNAL OF MARINE SCIENCE, vol.73, pp.1656-1658, 2016 (SCI-Expanded)
- XXIX. **A critique of the balanced harvesting approach to fishing**  
Froese R., Walters C., Pauly D., Winker H., Weyl O. L. F., Demirel N., Tsikliras A. C., Holt S. J.  
ICES JOURNAL OF MARINE SCIENCE, vol.73, pp.1640-1650, 2016 (SCI-Expanded)
- XXX. **Revisiting safe biological limits in fisheries**  
Froese R., Coro G., Kleisner K., Demirel N.  
FISH AND FISHERIES, vol.17, pp.193-209, 2016 (SCI-Expanded)
- XXXI. **New records of jellyfish species in the Marmara Sea**  
Isinibilir M., Yilmaz I., Demirel N.  
ITALIAN JOURNAL OF ZOOLOGY, vol.82, no.3, pp.425-429, 2015 (SCI-Expanded)

- XXXII. **An overall indicator for the good environmental status of marine waters based on commercially exploited species**  
Froese R., Demirel N., Sampang A.  
MARINE POLICY, vol.51, pp.230-237, 2015 (SSCI)
- XXXIII. **Ichthyoplankton dynamics in a highly urbanized estuary**  
Demirel N.  
MARINE BIOLOGY RESEARCH, vol.11, pp.677-688, 2015 (SCI-Expanded)
- XXXIV. **Influence of the extreme conditions on the water quality and material exchange flux in the Strait of Istanbul**  
Altioğ H., Aslan A., Övez S., Demirel N., Yuksek A., Kiratli N., Tas S., Muftuoğlu A. E., Sur H. I., Okus E.  
JOURNAL OF MARINE SYSTEMS, vol.139, pp.204-216, 2014 (SCI-Expanded)
- XXXV. **Reproductive biology of *Trachurus mediterraneus* (Carangidae): a detailed study for the Marmara - Black Sea stock**  
Demirel N., Yuksek A.  
JOURNAL OF THE MARINE BIOLOGICAL ASSOCIATION OF THE UNITED KINGDOM, vol.93, pp.357-364, 2013 (SCI-Expanded)
- XXXVI. **Weight-length relationships of 28 fish species in the Sea of Marmara**  
Demirel N., Murat Dalkara E.  
TURKISH JOURNAL OF ZOOLOGY, vol.36, pp.785-791, 2012 (SCI-Expanded)
- XXXVII. **Alien Crustacean Decapods from the Aegean Coast of Turkey**  
Yokeş M. B., Karhan S. U., Okus E., Yuksek A., Aslan-Yilmaz A., Yilmaz I. N., Demirel N., Demir V., Galil B. S.  
AQUATIC INVASIONS, vol.2, no.3, pp.162-168, 2007 (SCI-Expanded)

## Articles Published in Other Journals

- I. **None**  
Demirel N.  
JBM, vol.1, pp.1, 2012 (Non Peer-Reviewed Journal)

## Books & Book Chapters

- I. **Status of the Sea of Marmara ecosystem and its fishery resources: Mucilage episodes and recommendations for sustainable fisheries**  
Demirel N., Yıldız T., Ulman A., Zengin M., Akoglu E., Saygu I., Ertor Akyazi P., Gül G., Bedikoğlu D., Yilmaz I. N.  
in: Mucilage Problem in the Sea of Marmara, Meriç Albay, Editor, Istanbul University, İstanbul, pp.217-232, 2023
- II. **Sürdürülebilir Balıkçılık için "Ekosistem Temelli Yönetim"**  
Demirel N., Demir V., Oruç A., Akça N., Araç N., Kalem S.  
Wwf-Türkiye (Doğal Hayatı Koruma Vakfı), İstanbul, 2013

## Refereed Congress / Symposium Publications in Proceedings

- I. **Fishing subsidies and their impacts on marine ecosystems in Türkiye: The past, present and future**  
Demirel N.  
Workshop on Environmentally Harmful Subsidies, Marseille, France, 30 January 2024, pp.1
- II. **Fishing impact assessment on an altered marine ecosystem requires ecosystem approach to fisheries**  
Demirel N.  
Fish Forum 2024, Antalya, Turkey, 19 - 23 February 2024, pp.1
- III. **Ecosystem approach to marine management: Challenges and opportunities**

Demirel N.

International Conference on Türkiye's Contributions to the UN Decade of Ocean Science for Sustainable Development, Ankara, Turkey, 26 September 2023

**IV. FishBase contribution to improve knowledge in data-poor regions: a case study on the Sea of Marmara, Eastern Mediterranean**

Demirel N.

FishBase / SeaLifeBase Symposium, Brussels, Belgium, 4 - 05 September 2023, pp.1

**V. The status of the ecosystem and fishery resources in the Sea of Marmara**

Demirel N.

3rd National Marine Monitoring and Evaluation Symposium, Antalya, Turkey, 6 - 09 December 2022, pp.1

**VI. Potential effect of mucilage formation on fish stocks in the Sea of Marmara**

Demirel N.

5th National Marine Sciences Conference, Trabzon, Turkey, 3 - 05 June 2022, pp.1

**VII. Reassessment of the changing fisheries for data poor stocks in the Eastern Mediterranean**

Demirel N.

Fish Forum 2018, Rome, Italy, 10 - 14 December 2018, pp.1

## Supported Projects

2022 - 2024	Marmara Denzinde ticari öneme sahip bazı balıkların av verimindeki değişimlerin çevresel koşullarla ilişkisi, Project Supported by Higher Education Institutions
2016 - 2024	Türkiye Denizlerinde Bütünleşik İzleme Faaliyetleri kapsamında Marmara Denizi Ekolojik Kalite İzleme ve Değerlendirme Projesi, Project Supported by Other Official Institutions
2020 - 2020	Marmara Denizi'nde Ticari Öneme Sahip Balık Stoklarının Güncel Durumu ve İleriye Dönük Senaryoların Modellenmesi, TUBİTAK Project
2016 - 2016	Exploitation and status of European stocks, Other International Funding Programs
2015 - 2016	Deniz İzlemelerinde Standardizasyonun Sağlanması Projesi, Project Supported by Other Official Institutions
2015 - 2016	Marmara Denizi Berlam Balığı Stoklarının Ekosistem Yaklaşımı Çerçevesinde Sürdürülebilirlik Düzeyi, TUBİTAK Project
2015 - 2015	Marmara Denizi Kirlilik ve Ekolojik Kalite İzleme ve Değerlendirme Projesi, Project Supported by Other Official Institutions
2012 - 2013	Confronting the myth of the bitter sea pre historic exploitation of the eastern Mediterranean seascape, Project Supported by Private Organizations in Other Countries

## Activities in Scientific Journals

2016 - Continues	FRONTIERS IN MARINE SCIENCE, Assistant Editor/Section Editor
2015 - 2022	JOURNAL OF APPLIED ICHTHYOLOGY, Advisory Committee Member

## Scientific Refereeing

December 2023	EU Supported Other Project, The Sustainable Blue Economy Partnership, France
February 2022	H2020 Project, RIA Research and Innovation Actions Project, European Commission, Belgium
September 2020	H2020 Project, RIA Research and Innovation Actions Project, European Commission, Belgium
February 2019	H2020 Project, RIA Research and Innovation Actions Project, European Commission, Belgium
September 2017	H2020 Project, RIA Research and Innovation Actions Project, European Commission, Belgium
February 2016	H2020 Project, RIA Research and Innovation Actions Project, European Commission, Belgium

## Scientific Consultations

2016 - 2016	Project Consultancy, Food and Agricultural Organization
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## Scientific Research / Working Group Memberships

2024 - Continues	Rethinking The Blue Economy: Socio-Ecological Impacts And Opportunities - Rethinkblue - Ca22122, <a href="https://www.cost.eu/actions/CA22122/#tabs+Name:Description">https://www.cost.eu/actions/CA22122/#tabs+Name:Description</a> , University of Zadar, Croatia
2023 - Continues	Fishbase, <a href="https://www.fishbase.se/search.php">https://www.fishbase.se/search.php</a> , Quantitative Aquatics, Philippines
2023 - Continues	Mbon Europe: Marine Biodiversity Monitoring For Europe , <a href="https://euomarinenetwork.eu/activities/mbon-europe/">https://euomarinenetwork.eu/activities/mbon-europe/</a> , Nord University, Norway
2022 - Continues	Enhancing Small-Medium Islands Resilience By Securing The Sustainability Of Ecosystem Services - Smiles - Ca21158, <a href="https://cost-smiles.eu/">https://cost-smiles.eu/</a> , Open University of Cyprus, Cyprus (Gkry)
2021 - Continues	Unifying Approaches To Marine Connectivity For Improved Resource Management For The Seas - Sea-Unicorn - Ca19107, <a href="https://www.sea-unicorn.com/">https://www.sea-unicorn.com/</a> , Université Montpellier I, France

## Metrics

Publication: 47  
Citation (WoS): 1000  
Citation (Scopus): 1059  
H-Index (WoS): 16  
H-Index (Scopus): 15

## Non Academic Experience

2020 - 2020	United Nations, Food and Agricultural Organization (FAO), General Fisheries Commission for the Mediterranean (GFCM)
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