

Mustafa Korkmaz PhD

E-mail: korkmazm@metu.edu.tr

Work Experience

Research Assistant	Agri Ibrahim Cecen University, Science Faculty	2010 – 2011
Research Assistant	Hacettepe University, Institute of Science	2011 – 2017
Project Consultant	Hacettepe Technokent	2017 – 2021
Postdoctoral Researcher	Middle East Technical University	2021 –

Publications

- Korkmaz, M.**, Mangit, F., Dumlupınar, İ., Çolak, M. A., Akpınar, M. B., Koru, M., ... & Jeppesen, E. (2023). Effects of Climate Change on the Habitat Suitability and Distribution of Endemic Freshwater Fish Species in Semi-Arid Central Anatolian Ecoregion in Türkiye. *Water*, 15(8), 1619. <https://doi.org/10.3390/w15081619>
- Korkmaz, M.**, Mangit, F., Yerli, S.V. (2023). Land-use and Fish Condition Changes for over a Decade on Konya Closed Basin, are External Anomalies Affecting the Fish Condition? *Turkish Journal of Fisheries and Aquatic Sciences*, 23(9), TRJFAS22597. <https://doi.org/10.4194/TRJFAS22597>
- De Santis, V., Jeppesen, E., Volta, P., & **Korkmaz, M.** (2023). Impacts of Human Activities and Climate Change on Freshwater Fish—Volume II. *Water*, 15(23), 4166. <https://doi.org/10.3390/w15234166>
- Özkan, K.; **Korkmaz, M.**; Amorim, C.A.; Yılmaz, G.; Koru, M.; Can, Y.; Pacheco, J.P.; Acar, V.; Çolak, M.A.; Yavuz, G.C.; et al. Mesocosm Design and Implementation of Two Synchronized Case Study Experiments to Determine the Impacts of Salinization and Climate Change on the Structure and Functioning of Shallow Lakes. *Water*, 2023, 15, 2611. <https://doi.org/10.3390/w15142611>
- Çolak, M. A., Öztaş, B., Özgencil, İ. K., Soylyer, M., **Korkmaz, M.**, Ramírez-García, A., ... & Akyürek, Z. (2022). Increased Water Abstraction and Climate Change Have Substantial Effect on Morphometry, Salinity, and Biotic Communities in Lakes: Examples from the Semi-Arid Burdur Basin (Turkey). *Water*, 14(8), 1241. <https://doi.org/10.3390/w14081241>
- Yılmaz, G., Çolak, M. A., Özgencil, İ. K., Metin, M., **Korkmaz, M.**, Ertuğrul, S., ... & Jeppesen, E. (2021). Decadal changes in size, salinity, waterbirds, and fish in lakes of the Konya Closed Basin, Turkey, associated with climate change and increasing water abstraction for agriculture. *Inland Waters*, 11(4), 538-555. <https://doi.org/10.1080/20442041.2021.1924034>
- Mangit F., **Korkmaz M.**, Yerli S.V., 2018. Morphological variation of pumpkinseed (*Lepomis gibbosus*) with emphasis

on allometry. Turkish Journal of Zoology, 42(1), 53-61. <https://doi.org/10.3906/zoo-1703-45>

8. Yerli, S.V., **Korkmaz, M.**, Mangit, F., 2016, Length–length and length–weight relationships for four endemic Cyprinid species in Küçük Menderes River Basin, Turkey, Journal of Applied Ichthyology, 32, 991-993. <https://doi.org/10.1111/jai.13133>
9. **Korkmaz M.**, Mangit F. and Yerli S.V., 2017. Main Growth Parameters of a Threatened Species *Chondrostoma holmwoodii* (Boulenger, 1896) from Tahtalı Reservoir, İzmir, Turkey. Journal of Limnology and Freshwater Fisheries Research. doi: 10.17216/LimnoFish-329521.
10. Mangit F., **Korkmaz M.**, Sü U., Yerli S.V., 2017. Actual Status of Eber Lake in Terms of Fish Community Structure. Journal of Limnology and Freshwater Fisheries Research 3 (2017): 101-106. doi: 10.17216/limnofish.327824
11. **Korkmaz M** and Yerli S.V., 2015. Phylogenetic Position of *Barbus lacerta* Heckel, 1843. Front. Mar. Sci. Conference Abstract: XV European Congress of Ichthyology. doi: 10.3389/conf.FMARS.2015.03.00150
12. **Korkmaz M.**, Mangit F. and Yerli S.V., 2015. Length–Weight Relationships for Freshwater Fish Species in Küçük Menderes River Basin, Turkey. Front. Mar. Sci. Conference Abstract: XV European Congress of Ichthyology. doi: 10.3389/conf.FMARS.2015.03.00167
13. **Korkmaz M.** and Kara C., 2014 Evaluation of Eicosapentaenoic and Docosahexaenoic Acid Values of Trout Species Distributed in Turkey, Journal of Academic Documents for Fisheries and Aquaculture 3:155-159.
14. Gürlek M.E., Kebapçı Ü., Kara C., **Korkmaz M.** and Güneş H., 2013. A Preliminary Research on Malacofauna of Ağrı Province. Adıyaman University Journal of Science, 3(1), pp.1-19.
15. Gürlek M.E., **Korkmaz M.** and Kara C., 2011. Some Morphometric Features of *Lymnaea stagnalis* (L., 1758) (Gastropoda:Lymnaeidae) Living in Doğubeyazıt Reeds (Ağrı). Kahramanmaraş Sutcu Imam University Journal of Natural Sciences, 14(1), 27-32
16. Gürlek M.E., Kara C., **Korkmaz M.**, 2009. The Fish Fauna of Upper Zamantı Stream (Tomarza-Örenşehir). Research Journal of Biology Sciences. 3 (2): 91-98, 2010 ISSN: 1308-3961.

Book Sections

17. Yerli, S. V., **Korkmaz, M.** and F. Mangit. 2016. Biological assessment by a fish-based index of biotic integrity for Turkish inland waters. Pages 91–97 in W. W. Taylor, D. M. Bartley, C. I. Goddard, N. J. Leonard, and R. Welcomme, editors. Freshwater, fish and the future: proceedings of the global cross-sectoral conference. Food and Agriculture Organization of the United Nations, Rome; Michigan State University, East Lansing; and American Fisheries Society, Bethesda, Maryland. (Book Section)
18. **Korkmaz M.** Use of fish species as model organisms. Dinçer PR, editor. Use of Zebrafish as a Model Organism. 1st Edition. Ankara: Türkiye Klinikleri; 2023. p.97- 103. (In Turkish)

Projects

EU Project

1. The Research of Biological Elements for the River Basins of Susurluk, Konya and Meriç-Ergene within the Framework of the Technical Assistance for The Conversion of River Basin Action Plans into River Basin Management Plans. Europe Aid/134561/D/SER/TR, TR2011/0327.21-05-01-001, TRAGSATEC, NEN, HTTM, **2018**
Coordinator, Fish Expert

Tübitak Projects

1. Climate change effects on trophic structure and dynamics in saline and brackish water based on a space-for-time field sampling, controlled mesocosm experiments, paleoecology, remote sensing and modelling (CLIM-SALTLAKES). **2021-2020 - 2024**
Researcher
2. Evaluation of Movements, Distribution Areas and Habitat Utilisation of Luciobarbus esocinus in Keban Dam Lake by Telemetric Methods. **2019-2020**
Researcher

Governmental and Other Research Projects

3. Research, Monitoring and Conservation Project of Sea Turtle (*Caretta caretta*, *Chelonia mydas*) and Nil Turtle (*Trionyx triunguis*) Populations in Beach Areas of Göksu Delta, **2023**
Project Manager
4. Sakarya Gas Field Development Project - Environmental and Social Impact Assessment (ESIA), Offshore Physical and Biological Monitoring. Turkish Petroleum Offshore Technology Center (TP OTC). **2023**
Hydrobiologist
5. Göksu Delta Special Environmental Protection Area Wetland and Terrestrial Area Ecosystem Rehabilitation/Restoration Project, **2022**
Researcher
6. Research, Monitoring and Conservation Project of Sea Turtle (*Caretta caretta*, *Chelonia mydas*) and Nil Turtle (*Trionyx triunguis*) Populations in Beach Areas of Göksu Delta, **2022**
Project Manager
7. Research, Monitoring and Conservation Project of Sea Turtle (*Caretta caretta*, *Chelonia mydas*) and Nil Turtle (*Trionyx triunguis*) Populations in Beach Areas of Göksu Delta, **2021**
Project Manager
8. Biological monitoring project within the scope of the Water Framework Directive in the Western Black Sea Basin, **2021**
Researcher
9. Biological monitoring project within the scope of the Water Framework Directive in the Antalya Basin, **2021**
Researcher
10. Evaluation of Movements, Distribution Areas and Habitat Uses of Luciobarbus esocinus in Keban Dam Lake by Telemetric Methods, **2020**
Researcher
11. Research, Monitoring and Conservation Project of Sea Turtle (*Caretta caretta*, *Chelonia mydas*) and Nil Turtle (*Trionyx*

triunguis) Populations in Beach Areas of Göksu Delta, 2020

Project Manager

12. Determination of Assimilative Capacity and Improvement of Water Quality in Stagnant Waters, The Ministry of Forestry and Water Affairs, General Directorate of Water Management, ALKA, HT TTM, **2018**

Researcher

13. Fish gene resources of Western Black Sea, Northern Aegean and Susurluk basins, General Directorate of Agricultural Research and Policies, TAGEM/15 AR-GE/29, **2018**

Researcher

14. Conservation and monitoring of marine turtles (*Caretta caretta*, *Chelonia mydas*) and Nile soft shell turtle (*Trionyx triunguis*) in Fethiye - Göcek SPA in terms of species and habitat monitoring, HT TTM, **2015**

Researcher

15. Project of Biological Monitoring for Küçük Menderes Basin within WFD, supported by The Ministry of Forestry and Water Affairs, General Directorate of Water Management, Segal, HT TTM, **2015**

Researcher

16. Integrated Marine Pollution Monitoring Project Aegean Sea, supported by The Ministry of Environment and Urbanization, General Directorate of Environmental Management, ALKA, HT TTM, **2013**

Researcher

17. Integrated Marine Pollution Monitoring Project Mediterranean Sea, supported by The Ministry of Environment and Urbanization, General Directorate of Environmental Management, ALKA, HT TTM, **2013**

Researcher

18. Monitoring of Akarçay Basin and Determination of Reference Points, The Ministry of Forestry and Water Affairs, General Directorate of Water Management, ALKA, HT TTM, **2013**

Researcher

19. Monitoring of Ergene Basin and Determination of Reference Points supported by The Ministry of Forestry and Water Affairs, General Directorate of Water Management, ALKA, HT TTM, **2013**

Researcher

Congress and Symposiums

International

1. XVII European Congress of Ichthyology 2023 - Oral Presentation

Mustafa Korkmaz, Fatih Mangıt, İlayda Dumlupınar, Sedat V. Yerli, Korhan Özkan, Meryem Beklioğlu, Erik Jeppesen “Using Species Distribution Modelling to Identify Protected Areas for Conserving the Endemic and Threatened Freshwater Fishes of Central Anatolia, Türkiye”.

2. SEEIC 2022 - - Oral Presentation

Mustafa Korkmaz Insights into climate change effects on fish biodiversity in the semi-arid Konya closed basin, Turkey. 2nd Southeast European Ichthyological Conference. October 12-15, 2022, in Supetar (island of Brač), Croatia.

3. SOFAS 2022 - - Oral Presentation

Mustafa Korkmaz, Arely Ramírez-García, Juan Pablo Pacheco, Cemrey Dede, Vildan Acar, Celina Aznarez, Serhat Ertuğrul, Gültekin Yılmaz, Kerem Gökdağ, Meltem Koru, Melisa Metin, Cihelio Alves Amorim, M. Arda Çolak, Zuhul Akyürek, Korhan Özkan, Meryem Beklioğlu, Erik Jeppesen. “Current Status and Major Threats of the Konya Closed Basin Endemic Fish Fauna”

4. 36th Congress of the International Society of Limnology – 2022 - Oral Presentation

Juan Pablo Pacheco, **Mustafa Korkmaz**, Lucia Cabrera-Lamanna, Cihelio A. Amorim, Gültekin Yılmaz, Vildan Acar, Serhat Ertuğrul, Arely Ramírez-García, ... Zuhul Akyürek, Korhan Özkan, Meryem Beklioğlu, Erik Jeppesen. Freshwater salinisation induces biodiversity loss and cyanobacteria dominance in periphyton: a salinity gradient experiment in shallow lake mesocosms. 36th Congress of the International Society of Limnology, 7 – 10 August 2022, Berlin, Germany.

5. 36th Congress of the International Society of Limnology – 2022 - Oral Presentation

Gültekin Yılmaz, Pelin Ertürk Arı, Lucia Cabrera-Lamanna, Cihelio Amorim, **Mustafa Korkmaz**, Thomas Alexander Davidson, Joachim Audet, Nusret Karakaya, Meryem Beklioğlu, Erik Jeppesen, Korhan Özkan, Juan Pablo Pacheco. Ecological drivers of GHG emissions in the Central Anatolian saline lakes based on a field study and mesocosm experiments. 36th Congress of the International Society of Limnology, 7 – 10 August 2022, Berlin, Germany.

6. 36th Congress of the International Society of Limnology – 2022 - Oral Presentation

Cihelio Amorim, Gültekin Yılmaz, Vildan Acar, **Mustafa Korkmaz**, Juan Pablo Pacheco, Lucía Cabrera-Lamanna, Canan Yavuz, Arely Ramírez García, Marco Vinicio Zamudio, Mehmet Arda Çolak, Can Özen, Zuhul Akyürek, Korhan Özkan, Meryem Beklioğlu, Erik Jeppesen. Impacts of salinization on shallow lakes: synchronized long-term gradient mesocosm experiments in two different climates, Turkey. 36th Congress of the International Society of Limnology, 7 – 10 August 2022, Berlin, Germany

7. SEEIC 2017 - Oral Presentation

Korkmaz M. and Yerli S.V., Taxonomic Revision of *Barbus lorteti* Sauvage 1882, 1st Southeast European Ichthyological Conference. 27-29 September 2017, Sarajevo, Bosnia-Herzegovina.

8. SEEIC 2017 - Oral Presentation

Korkmaz M. and Yerli S.V., Validation and Phylogenetic Position of *Barbus niluferensis* Turan, Kottelat & Ekmekçi, 2009, 1st Southeast European Ichthyological Conference. 27-29 September 2017, Sarajevo, Bosnia-Herzegovina.

9. LIMNOFISH 2017 - Oral Presentation

Yerli S.V., **Korkmaz M.** and Mangit F., Length–Weight Relationships for *Squalius aristotelis* in Tuzla Stream,

Çanakkale, Turkey. 1th International Symposium on Limnology and Freshwater Fisheries. 04-06 October 2017, Isparta, Türkiye.

10. ECOLOGY 2017- Poster Presentation

Mangıt F, **Korkmaz M**, Sü U and Yerli S.V., Status of Tahtalı Reservoir with Emphasis on the Impact of Nonnative Fish Species. Ecology Symposium, 11-13 May 2017, Kayseri.

11. ECOLOGY 2017 - Poster Presentation

Korkmaz M, Mangıt F, Sü U and Yerli S.V., Effects of Non-Native Species on Native Fish Fauna Case Study; Beydag Reservoir. Ecology Symposium, 11-13 May 2017, Kayseri, Turkey.

12. FABA 2016 - Poster Presentation

Mangıt F, **Korkmaz M**, Sü U and Yerli S.V. Demersal Fish Fauna of Mediterranean Sea, Turkey Within Selected Points, FABA 2016, 3-5 November 2016, Antalya, Turkey.

13. FABA 2016 - Poster Presentation

Korkmaz M, Mangıt F, Sü U and Yerli S.V. Demersal Fish Fauna of Aegean Sea, Turkey Within Selected Points, FABA 2016, 3-5 November 2016, Antalya, Turkey.

14. ICNASE 2016 - Full Text Paper

Güneş H., Kara C., **Korkmaz M.**, İğde M. Evaluation of Some Fatty Acid Values of *Silurus glanis* Linnaeus 1766 Distributed Menzelet Reservoir in Kahramanmaraş Turkey, 19-20 Mart 2016, Kilis, Türkiye.

15. ICANAS 2016- Oral Presentation

Korkmaz M. Length Weigth Relationships for *Luciobarbus kotteleti* and *Luciobarbus lydianus* in Turkey, International Conference on Advances in Natural and Applied Sciences, 21-23 April 2016, Antalya, Turkey.

16. ICENS 2016- Oral Presentation

Yerli S.V., **Korkmaz M.**, Mangıt F. 2014. Main growth parameters of *Chondrostoma holmwoodii* (Boulenger, 1896) from Tahtalı reservoir. 2. International Conference on Engineering and Natural Sciences (ICENS), 24-28 May 2016, Sarejova, Bosnia-Herzegovina.

17. ICENS 2016 Oral Presentation

Korkmaz M. and Yerli S.V. Length–Weight Relationships for Some *Barbus* Species in Turkey. 2.International Conference on Engineering and Natural Sciences (ICENS), 24-28 May 2016, Sarejova, Bosnia-Herzegovina.

18. XV. European Congress of Ichthyology 2015- Poster Presentation

Korkmaz M. and Yerli S.V. Length–Weight Relationships for Freshwater Fish Species in Küçük Menderes River Basin, Turkey, Conference Abstract: XV European Congress of Ichthyology, 7-11 Sept. 2015, Porto, Portugal.

19. XV. European Congress of Ichthyology 2015- Poster Presentation

Korkmaz M. and Yerli S.V. Phylogenetic Position of *Barbus lacerta* Heckel, 1843., Conference Abstract: XV European Congress of Ichthyology, 7-11 Sept. 2015, Porto, Portugal.

20. Fish Passage 2015- Poster Presentation

Korkmaz M., Mangıt F and Yerli S.V. The Effect of hydroelectric power stations on fish migration: A Case study at Yanbolu Stream, Conference Abstract: International Conference on Engineering and Ecohydrology for Fish Passage 2015, Groningen, Netherland.

21. Global Conference on Inland Fisheries 2015- Poster Presentation

Yerli, S.V., **Korkmaz, M.**, Mangıt, F., The Success of biological assessment by ecological criteria in Turkey inlands, Global Conference on Inland Fisheries, Global Conference on Inland Fisheries, 26-28 January 2015, Rome, Italy

22. Symposia on the Conservation of Med. Marine K. Habitats 2014 – Oral Presentation and Full Text Paper

Yerli S.V., Sü U., **Korkmaz M.**, Mangıt F. 2014. Ecological Quality Classification of Aegean and Mediterranean Seas According to Demersal Fish Fauna, Symposia on the Conservation of Med. Marine K. Habitats, 27-31 October 2014, Portoroz, Slovenia.

National

1. II. National Trout Symposium

Oral Presentation

Karaman - Turkey, 2010

Korkmaz M , Kara C., Diraz E., Karaman Ş. Fatty acid composition of *Salmo plathycephalus*. II. National Trout Symposium, 6-8 July 2010, Karaman, Turkey.

2. II. Wetlands Congress

Poster presentation

Kırşehir -Turkey, 2011

Gürlek M.E., **Korkmaz M.**, Kara C., Kebapçı U., Freshwater Gastropods of Doğubeyazıt Wetlands. II. Wetlands Congress. 9-11 June 2011, Kırşehir, Turkey.

3. III. National Trout Symposium

Poster Presentation

Kastamonu - Turkey, 2013

Korkmaz M., The Comparison of Fatty Acid Composition of Some Commercial Fish Species in the Black Sea. III. National Trout Symposium. 24-26 May 2013, Kastamonu, Turkey.

4. National Symposium on Fisheries and Aquatic Sciences 2012

Oral Presentation

Eskişehir - Turkey, 2012

Korkmaz M., Kara C., Fatty Acid Composition of Some Trout Species in terms of Eicosapentaenoic and Docosahexaenoic Acid Values. National Fisheries and Aquatic Sciences (FABA 2012), 21-24 November 2012, Eskişehir, Turkey.

5. National Ecology Symposium 2013

Poster Presentation

Tekirdağ - Turkey, 2013

Korkmaz, M., Mangıt, F., Yerli, S.V., Length-Weight Relationship and Morphometric Properties of *Lepomis gibbosus* (L., 1758) from Different Habitats, National Ecology Symposium, 2-4 May 2013, Tekirdağ, Turkey.

6. National Symposium on Fisheries and Aquatic Sciences 2013

Oral Presentation

Turkey, 2013

Mangıt, F., **Korkmaz, M.**, Yerli, S.V., Morphometric Variation in Pumpkinseed Sunfish (*Lepomis gibbosus* L., 1758) Populations, National Fisheries and Aquatic Sciences (FABA 2013), 30 May - 1 June 2013, Erzurum, Turkey.

7. National Ecology Symposium 2014 **Poster Presentation** **Famagusta - TRNC, 2014**

Mangıt, F., **Korkmaz, M.**, Yerli, S.V., Fish Fauna Assessment of Tigris River Basin,, National Ecology Symposium, 1-4 May 2014, Famagusta, Turkish Republic of Northern Cyprus

8. XXII. National Biology Congress **Poster Presentation** **Eskişehir - Turkey, 2014**

Korkmaz, M., Mangıt, F., Yerli, S.V., Preliminary Study on the Fish Fauna of Hakkari, XXII. National Biology Congress, 23-27 June 2014, Eskişehir, Turkey.

9. National Ecology Symposium 2015 **Poster Presentation** **Sinop - Turkey, 2015**

Mangıt, F., **Korkmaz, M.**, Yerli, S.V., Actual status of Lake Eber, Ecology 2015, 6-9 May 2015, Sinop, Turkey.

10. IX. National Fisheries Symposium **Oral Presentation** **Sinop - Turkey, 2017**

Yerli S.V., Mangıt F., **Korkmaz M.**, Sü U., Hüyükü İ., Length-Weight Relationships of Four Different Cyprinidae Species in Western Black Sea Basin, IX. National Fisheries Symposium, 12-15 September 2017, Sinop, Turkey.

Other Activities

1. Horizon 2020 Above Threshold Award – “Excellence in Rare Disease Research: Focus on Genome Editing and Rare Disease Modeling (EXCforRD)”, Horizon 2020
2. Deputy Translation Editor – “Human Molecular Genetics” Hipokrat Publishing 2020. Translation Editor: Prof. Dr. Pervin Dincer
3. Chapter Translation – “Human Molecular Genetics” Chapter 12 “Human population genetics” Hipokrat Publishing 2020.
4. Handling of laboratory animals certificate
5. R programming certification

Awards and Supports

1. Horizon Europe Above Threshold Award - "EXCELLENCE IN RARE DISEASE RESEARCH FOCUS ON RARE DISEASE MODELLING", Horizon Europe project application (10/15) - TÜBİTAK 2021.
2. Horizon 2020 Above Threshold Award - "Excellence in Rare Disease Research: Focus on Genome Editing and Rare Disease Modelling (EXCforRD)", Horizon 2020 / Twinning Project application (13/15) - TÜBİTAK 2019.
3. 2023 D, U2020 - Project Support, Project No; 511345, TÜBİTAK 2021
4. 2023 D, U2020 - Project Support, Project No; 634781, TÜBİTAK 2022

Other

Erasmus Student Exchange Programme	SGGW University, Warsaw Poland	August 2008 - February 2009
Erasmus Internship Mobility Programme	Utrecht University, Utrecht Netherlands	June 2010 - October 2010