

MERIP is now completely open-access.

[Read our announcement here.](#)



*Middle East Research and Information Project:  
Critical Coverage of the Middle East Since 1971*



## The Lost Wetlands of Turkey

Caterina Scaramelli *In: 296 (Fall 2020)*

Every year around World Wetlands Day on February 2, Turkish news outlets report that the country has lost between 1.3 and 2 million hectares of wetlands since the mid-twentieth century. Since the founding of the Turkish Republic in 1923, over 1.3 million hectares of wetlands have been drained and transformed into fields, factories or urban neighborhoods, flooded in large dam reservoirs and irremediably damaged by various infrastructural developments.<sup>[1]</sup> The rate of wetland decline in Turkey—half of all wetlands lost over the past century—is in line with the global loss: Since 1900, a similar proportion of the world’s wetlands have been drained and altered for agriculture and development.<sup>[2]</sup>

The data on the staggering extent of wetland loss in Turkey is usually illustrated in the media with a recurring comparison: The surface area of the lost wetlands, journalists and commentators write, is equivalent to almost twice the expanse of the Sea of Marmara, or three times the surface area of Lake Van.<sup>[3]</sup> This ubiquitous image is meant to symbolize to a Turkish readership the vastness and physical incommensurability of the ecological loss. Journalists draw a simplified geographical equivalence between the extent of lost Turkish wetlands and the surface area of familiar bodies of water because they



Salt marshes in the Gediz Delta wetland conservation area. Photo by author.

presume that many readers need this image to understand the scale of the problem and that they have not experienced wetland loss firsthand. The comparison, however, obscures the diversity of Turkish wetland ecosystems, which include the alluvial forests of Iğneada in Kırklareli, the fishing lagoons and salt marshes of Izmir's Gediz Delta and the volcanic caldera lake on Mount Nemrut. The media's image collapses many different experiences of ecological degradation and reclamation into the single loss of a seemingly uniform type of ecosystem, folding together all its diverse cultural, ecological, economic and social values.

The contemporary Turkish term for wetland, *sulakalan* (meaning "water place"), includes a wide diversity of shallow water ecosystems, and it is generally used by engineers, natural scientists and bureaucrats. Ordinary citizens and residents rarely use the word *sulakalan* in their everyday lives to refer to the places where they might go to fish, harvest reeds, gather succulent plants, observe the seasonal movements of birds, pasture water buffaloes or visit for

leisure. Instead, they tend to use the specific and localized place names for these sites.

But many farmers, fishermen, pastoralists and urban dwellers have indeed witnessed firsthand the environmental degradation and loss of wet meadows, fishing grounds, swamp forests and lakes over the course of their lives—often within years or even months.

Common media discourses of wetland disappearance omit the experiences of the people who live and work in wetland areas and neglect their stories of deep loss and marginalization as conservation boundaries and regulations restrict their access to fisheries, pastures and sources of wood, reeds, wild plants and hunting game. At the same time, conservationists romanticize them as part and parcel of the wetland cultures to be treasured and preserved.

While coverage of wetland loss by journalists, scholars and environmental activists brings attention to a critical issue, thinking about wetlands in an overly generalized way offers limited insights. A different approach is needed in order to understand the diverse range of specific struggles over wetlands and the consequences for local communities. When examining wetland conservation in Turkey it is first vital to understand its close connection to histories of wetland drainage, to the state's imperatives of national resource development and the shifting scientific and legal concepts of the wetlands themselves. Rather than relying on generalized data, wetland advocates should be more attentive to the ecological specificity of different kinds of wetlands, to regional and national development processes and to the land and water uses that led to changes in wetland ecologies. In addition, wetland research should take into account the

**Common media discourses of wetland disappearance omit the experiences of the people who live and work in wetland areas and neglect their stories of deep loss and marginalization as conservation boundaries and regulations restrict their access to fisheries, pastures and sources of wood, reeds, wild plants and hunting game.**

varied experiences of environmental change from the perspective of the people who live in and near the wetlands. The inclusion of this locally specific information will reveal the sometimes damaging effects of conservation policies as state agencies and non-governmental organizations (NGOs) often fail to meaningfully include rural and working-class residents as participants, beneficiaries and interlocutors.

## **Drainage and Development**

Shallow lakes, salt marshes and swamp forests have been sites of human settlement for millennia. Late Ottoman policies of agricultural expansion and nomadic population control in the nineteenth century included several attempts to drain wetlands and turn them into fields and settlements for newly sedentary populations. These efforts, underscored by Ottoman officials' notions of agricultural civilization, were often unsuccessful. In many cases, nomadic communities resisted permanent settlement, especially in the marshy lowlands that were being drained. In the 1920s and 1940s, the Turkish state drained wetlands to address national public health concerns, for example to combat malaria in regions characterized by shallow water and seasonal flooding into fields and water canals.[4]

While wetland reclamation was part and parcel of projects of agricultural development, reclaimed lands also provided space to resettle exchanged and displaced populations from the Balkans in the latter decades of the Ottoman Empire and after the founding of the Turkish Republic. Thousands of migrants within Turkey, seeking a better livelihood or cheap land, or displaced by large infrastructure projects that rendered their villages unlivable, also relocated to the newly drained wetlands. In turn, they were often disappointed to find soils that were soggy and impoverished, fierce seasonal diseases and harsh, humid climates.

Drainage projects continued in earnest from the 1950s, facilitated by the founding of the Turkish

**Many large Turkish wetlands—both**

Hydraulic Works (Devlet Su Isleri, or DSI) in 1952, an agency modeled on the Tennessee Valley Authority (TVA) in the United States. Legislative measures, like the 1950 *Law of Drained Wetlands and Reclaimed Lands*, provided incentives for landowners and state agencies to undertake wetland drainage projects to expand agricultural production. In this period, many large Turkish wetlands—both coastal and inland—were drained completely and disappeared, as politicians and bureaucrats sought to create and distribute new agricultural land. In the DSI's accounting, by the late 1960s, one third of the country's surveyed wetlands had already been drained and one third was scheduled for agricultural reclamation. It was in the heyday of wetland drainage that official conversations began to emerge among state bureaucrats and scientists on the imperative of wetland preservation in Turkey.

**coastal and inland  
—were drained  
completely and  
disappeared, as  
politicians and  
bureaucrats sought  
to create and  
distribute new  
agricultural land.**

## Preserving the Turkish Wetlands

Several scholars and regional commentators have suggested that environmental conservation in Turkey has merely been an appropriation of European and American ideals. While Turkish environmental experts do participate in international conversations, they also advance their own visions that are embedded in the context of shifting state politics of land planning, natural resource development and demographic restructurings during the twentieth century. The enthusiasm and moral commitment to wetlands, beyond utilitarian reasons of resource preservation, by scientists, ornithologists and bureaucrats—in the 1960s as much as now—suggest that different social groups see reflections of their ideals, aspirations and values in the wetlands.<sup>[5]</sup>

During Turkey's first international wetland conference, the Technical Meeting on Wetland Conservation held in Istanbul and Ankara in 1967, the word *sulakalan* became an established scientific and planning term for wetland. The draft of an international agreement for the preservation of wetlands was

circulated for the first time among these international attendees—a small group of male scientists and bureaucrats from Europe, Iran and the United States. Among the conference organizers was Zekai Bayer, a bureaucrat who headed Turkey's National Parks Directorate.[6] In 1961, the European Training Agency (a Marshall Plan organization tasked with increasing European productivity through programs of knowledge transfers from the United States) sponsored Bayer's enrollment in a master's program at the Department of Resource Development at Michigan State University to further his expertise in the management of national parks and nature recreation.[7]

Turkish environmental experts participated extensively in these international conservation networks. But they largely drew on their own nationalist understandings of nature, value and development—as well as on cultural and religious notions of ecology—to implement their visions at home, where wetlands were among the first areas targeted for nature conservation. Between 1958 and 1959 the government of Turkey established three national parks—one of them was Lake Manyas in Balıkesir, the country's first wetland conservation area. German biologists at Istanbul University who were conducting research at Lake Manyas in the 1940s petitioned for it to be designated a “bird paradise” (*kuş cenneti*) to protect its herons, cormorants and spoonbills. The term bird paradise, derived from German and English, suggested a transcendental return to Eden through a certain aesthetic experience of nature. It also suited Turkish bureaucrats and elites' longstanding love of and interest in birds, rooted in Ottoman aesthetics, poetry, art and architecture.[8]

In general, Turkish bureaucrats have conceived of wetland conservation in terms of resource use and the need for enhanced scientific expertise to manage finite natural resources.[9] For example, at the 1967 Technical Meeting, Bayer emphasized the need to develop educational and training programs, establish wetland research centers and implement wetland conservation measures in the Meriç Delta and at Lake Manyas. Bayer also stressed the problems posed to environmental conservation by soil erosion and agricultural development. Other Turkish participants discussed the relationship between

agricultural development, overgrazing, vegetation cover and water management.

The official stance of the Turkish Ministry of Forestry with regards to wetland conservation since the 1960s has been a future-oriented approach to national resource management.[10] Tansu Gürpınar, a state geologist and director of the Lake Manyas National Park, was one of two Turkish delegates at the 1971 meeting of the International Conference for the Conservation of Wetlands at the coastal town of Ramsar, in Iran. This meeting culminated in the ratification of the first international agreement for the protection of wetlands, which had initially circulated as a draft in the 1967 Technical Meeting in Turkey.[11] Gürpınar and his colleague's presentation on Turkish wetlands largely revolved around the problems of illegal hunting and egg gathering and soil erosion. These bureaucrats blamed erosion on peasants' overgrazing and deforestation, which led to more wetland drainage to secure additional agricultural land. Yet they also suggested other, non-utilitarian concerns, taking care to mention matters like the "spectacular" fall migration of thousands of storks—a "deeply loved" bird that Turkish villagers consider sacred.[12]

Turkish conservation bureaucrats and technocrats like Bayer and Gürpınar were also active in starting civil society organizations focused on environmental protection.[13] Members of these organizations—middle and upper-class, highly educated urbanites—occupied positions in Turkish universities and ministries and went on to found other NGOs. Distinctions between state and civil society approaches to environmental conservation remained blurred, as environmental advocates and experts negotiated their belonging in multiple government, higher education and civil society institutions.

After Turkey formally joined the international Ramsar convention for wetland conservation in 1994, it declared several national wetlands to be of international importance. It would be another eight years until the Turkish Ministry of Forestry and Environment issued the country's first wetland legislation, the *Regulation for the Protection of Wetlands*. [14] Around the same time, Turkey instituted a National Wetlands Commission and a new Wetlands Department, and Wetlands Commissions were set up at the provincial and local levels. The Ministry of Forestry and Environment also prepared a series of five-

year plans for a National Wetlands Strategy and commissioned management plans for all wetlands protected by the Ramsar convention. Alongside this novel governmental wetland apparatus, Turkish university scientists and NGO staff crafted their own distinct projects of wetland research and advocacy. While wetland conservation efforts coalesced in focused efforts around a few national wetland reserves, the reclamation of wetland areas all over the country for industrial, urban and agricultural development continued at full speed.

Conservation and development might seem like opposite objectives for the wetlands. In many cases, however, the same infrastructure that irrigates agricultural fields on former wetlands is also used to maintain the remaining marshes nearby.

The institutions charged with preserving the remaining Turkish wetlands are situated within ministries also largely responsible for draining them. The Directorate of Wetland Conservation, part of the General Directorate of National Parks and Nature Conservation, is nested within the Ministry of Forestry and Agriculture. The competing mandates of these agencies become apparent in environmental legislation as much as in the everyday practices of wetland governance, which is largely centered on infrastructure development, top-down bureaucratic control and harsh limitations on rural use and access rights.

Turkish environmental conservation in the late twentieth century, then, has been carried out through a planning process driven by economic imperatives as much as by biological and ecological concerns with the finite nature of resources. Rural residents of wetland areas themselves—farmers, fishers and pastoralists—were absent from all these debates and were only mentioned through disparaging idioms of ignorance and resource over-use. The legacy of these conversations and debates continues to this day, as does

**The same infrastructure that irrigates agricultural fields on former wetlands is also used to maintain the remaining marshes nearby. The institutions charged with preserving the remaining Turkish wetlands are situated within ministries also largely responsible for draining them.**



the marginalization of people whose livelihoods, sense of self and communities and practical knowledge are rooted in the country's swamps, shallow lakes, wet meadows, mountain lakes and salt marshes.[15]

## Who Speaks for the Turkish Wetland?

Increasingly widespread concern with the health of wetlands in contemporary Turkey is forcing a reckoning with the damaging results of a long history of drainage, damming, water diversions and urban, industrial and agricultural pollution. There is also a rising grassroots politics of Turkish environmentalism explicitly tied to concerns with livelihood, local cultures of nature, identity and democratic rule. The nature of environmental mobilization in Turkey since the 1990s has clearly expanded beyond the top-down and technocratic concern with environmental pollution, erosion and species preservation that characterized Turkish civil society engagements with ecological questions since the 1950s.

While media attention has primarily focused on popular opposition to large dams, thermal and nuclear power plants, mines, run-of-the-river hydropower and deforestation, wetlands have received much less journalistic and scholarly coverage. Beyond the yearly reporting of Turkey's wetland loss, there are only a few social-scientific studies on specific wetland contestations and transformations.

The metrics of wetland loss, however important in revealing the extent of their disappearance, risk obscuring many socio-cultural processes. While conducting ethnographic research on the transformation of Turkish wetlands between 2012 and 2018, I learned about the everyday experiences of shallow water ecosystems from people who lived and worked in the wetland, like Fatma and her husband.[16]

**There is also a rising grassroots politics of Turkish environmentalism explicitly tied to concerns with livelihood, local cultures of nature, identity and democratic rule.**

The daughter of Muslim Bulgarian farmers resettled to a hamlet in Izmir's Gediz Delta, Fatma worked at the nearby factory. After work, her husband picked her up, riding a scooter from the tanneries where he worked, and they crossed the Gediz Delta wetland conservation area. They fished for sea bass, mullet and sole from their dinghy in a fishing lagoon nearby, and the sale of their fish supported their growing family. It is people such as these whose livelihoods are at stake as wetlands are destroyed or become increasingly polluted.

Yet the conservation measures that seek to preserve wetlands by preventing fishers from accessing fishing sites can be equally damaging. In Fatma and her husband's case, they are still able to fish in the shallow waters of the lagoon. The wetland park managers, however, recently removed fishers' barracks from the area and replaced them with one building, meant to be shared between multiple fishermen. The building is cold and drafty and Fatma no longer has a private space to change her clothes—often soaked from waves, wind and rain—after a cold night of fishing. She is no longer able to fish alongside her husband, but on most evenings she continues to mend their fishing nets at home.



Fishermen set off in the morning in one of the Kızılırmak Delta's brackish lakes, in the wetland conservation area. Photo by author.

I met another wetland dweller, Mustafa, in the brackish and freshwater lakes in the Kızılırmak Delta, in the heart of another wetland conservation area. The son of a landless farm laborer who toiled in others' fields, Mustafa first started fishing with his father at seven years old. Now a father of three young boys, every morning he drove his small motorized dinghy and cast his nets in the lake to capture carp, crawfish and zander. Mustafa hoped his three children would learn other professions, for he had experienced the decrease of fish stock in the lake, contended with a new invasive species of carp that ate the other fish eggs and had no local predators, and faced increasing restrictions on fishing and access in the conservation area.

Mustafa and Fatma experienced firsthand the devastating consequences of industrial pollution, drainage and increasing salinization of the marshes and coastal waters near their homes—while also benefiting from the very industrial and construction jobs that caused environmental degradation in the wetlands. Wetland conservation policies preserved some of the lakes, lagoons and brackish marshes from agricultural and industrial encroachment. But since Fatma and Mustafa are marginal to environmental conservationists' accounts of the wetland and excluded from decision-making processes, their access and use rights within the conservation zone—fundamental to their own livelihoods—have been restricted.

Talking about the loss of the wetlands as a generalized category risks becoming a way to avoid listening to these stories of people who live on or near swamp forests, lake shores and estuaries, who gain their livelihoods, find sources of pleasure, make community, transmit knowledge and weave family histories through their varied engagements with place. It also risks simplifying the processes that have led to wetland ecological change and disappearances—processes that are multiple and interconnected, but also inherently steeped in regional politics and power relations.

[Caterina Scaramelli is a research assistant professor of anthropology and earth and environment at Boston University.]

---

## Endnotes

- [1] Gernant Magnin and Murat Yazar, *Important Bird Areas in Turkey* (Istanbul, Turkey: Dogal Hayati Koruma Dernegi, 1997), pp. 193–196.
- [2] Daniela Russi, Patrick ten Brink, Andrew Farmer, Tomas Badura, David Coates, Johannes Förster, Ritesh Kumar and Nick Davidson, *The Economics of Ecosystems and Biodiversity (TEEB) for Water and Wetlands* (Convention on Biological Diversity, 2012).
- [3] “60 yılda, Van Gölü’nün Üç Katı Göl Kurudu,” *CNN Turk*, June 6, 2020. “1,3 Milyon Hektarlık Sulak Alan Kaybedildi,” *Hürriyet*, January 1, 2007.
- [4] Kyle T. Evered and Emine Ö. Evered, “A Conquest of Rice: Agricultural Expansion, Impoverishment, and Malaria in Turkey,” *Historia Agraria*, 68 (2016). Chris Gratien, “The Ottoman Quagmire: Malaria, Swamps, and Settlement in the Late Ottoman Mediterranean,” *International Journal of Middle East Studies* 49 (2017).
- [5] Caterina Scaramelli, “The Delta Is Dead: Moral Ecologies of Infrastructure in Turkey,” *Cultural Anthropology* 34/3 (2019).
- [6] Ataman Osman Avdan, “The Making of Consurbia: Conservation, Urbanization, and Socio-Environmental Change in Turkey’s Gediz Delta” (Thesis, Arts & Social Sciences: Department of Sociology and Anthropology, Simon Fraser University, 2020), p. 50.
- [7] “Parks, Picnic Areas, Playgrounds Popular in Fun-Loving Turkey,” *American Recreation Journal* 1 (January 1961). *News from Turkey* (New York: Turkish Information Office, July 12, 1961).
- [8] Deniz Onur Erman, “Bird Houses in Turkish Culture and Contemporary Applications,” *Procedia-Social and Behavioral Sciences* 122, 2nd World Conference on Design, Arts and Education (March 19, 2014). Suraiya Faroqhi, ed., *Animals and People in the Ottoman Empire* (Istanbul: Eren, 2010).

[9] IUCN, IUBP and IWRB, *Proceedings of a Technical Meeting on Wetland Conservation, Ankara-Bursa-Istanbul, 9 to 16 October 1967* (Morges, Switzerland: IUCN Publications, 1968).

[10] Due to changes in ministries' names over time, I alternately refer to the Ministry of Forest, the Ministry of Water and Forestry, the Ministry of Environment and Forestry, or the Ministry of Forestry and Agriculture depending on the name of the agency in the specific historical period.

[11] Avdan, "The Making of Consurbia". Yılmaz Arı, "Ramsar Sözleşmesi'nin Doğa Koruma Yaklaşımına Eleştirel Bir Bakış," *Doğu Coğrafya Dergisi* 11/15 (2006). Erik Carp, ed., *Proceedings: International Conference on the Conservation of Wetlands and Waterfowl, Ramsar, Iran, 30 January-3 February 1971* (Slimbridge, United Kingdom: International Wildfowl Research Bureau, 1971).

[12] Carp, *Proceedings*, pp. 251-54.

[13] In 1955, Bayer founded the first Turkish environmental NGO, the Turkish Association for the Conservation of Nature (Türkiye Tabiatını Koruma Cemiyeti). Two decades later, Tansu Gürpınar founded the Society for the Protection of Nature (Doğal Hayat Koruma Derneği).

[14] Law No. 25818, subsequently revised in May 2005 and April 2014.

[15] Caterina Scaramelli, *How to Make a Wetland: Water and Moral Ecology in Turkey* (Stanford, California: Stanford University Press, in press).

[16] These are pseudonyms assigned to preserve my interlocutors' confidentiality.



Save as PDF

### How to cite this article:

Caterina Scaramelli "The Lost Wetlands of Turkey," *Middle East Report* 296 (Fall 2020).



© Middle East Research and Information Project

Cancel