

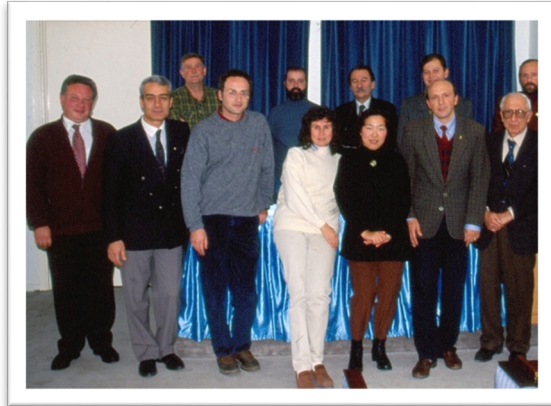
# 22 YEARS OF TUDAV





**Founding  
preparation for  
TUDAV,  
12 March 1996  
Taksim, together  
with Gündüz  
Aybay.**

**TUDAV 1996,  
some of the  
founders of our  
foundation  
(Taksim,  
Office of  
Gündüz Aybay)**



Front row, from right to left: Kasım Cemal Güven, Bayram Öztürk (Founder), Ayaka Amaha Öztürk, Şahika Ertan, Akın Candan, Haldun Ergünt, Neşet Kadirgan

Back row, from right to left: Hüseyin Öztürk, Şamil Aktaş, Gündüz Aybay, Ender Çılgin, Asaf Ertan

# 22 YEARS OF TUDAV



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© Turkish Marine Research Foundation, Publication No: 58, 2020  
ISBN: 978-975-8825-50-9

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## **PREFACE**

This book includes the work of the Turkish Marine Research Foundation (TUDAV) since the day it was established. This work showcases the results of 22 years of hard work, dedication, enthusiasm, courage, and a collaborative effort dedicated to the protection of our seas by a handful of people with limited resources. The palest ink is more reliable than the most powerful memory. TUDAV is reaffirming its work concerning the sustainable use of marine areas for future generations.

TUDAV has proven itself successful many times by providing scientific data about the protection of marine rights and profits of Turkey, as well as by publishing, and propagating this information via various global events and activities. It has been working very hard, not just in the name of science, but also for the conservation of marine biodiversity by familiarizing future generations with marine ecosystems through workshops and other educational activities. Books and journals routinely published by TUDAV can be found in many libraries around the world.

TUDAV will continue its work on endangered species, biological diversity, climate change, pollution, illegal fishing, Antarctica, and all topics concerning oceanography in the future. Partnerships with national and international organizations will be maintained. Efforts concerning recognition, research, protection, and sustainable use of seas and oceans will continue to be made.

TUDAV thanks everyone who has contributed to the foundation including the board members, advisors, employees, and the public. Without their help, without their valuable hard work and support, TUDAV would not be the respectable, international foundation it is today.

Best regards,

Prof. Bayram ÖZTÜRK

President and Founder

**TUDAV is dedicated to marine conservation and ensuring achieving SDG14 through research, information and knowledge management, education and awareness-raising for different stakeholder groups, grassroots implementation, and national and regional policy development. It cooperates with governments, local authorities, research institutions, think tanks, and civil society organizations; partners with regional and international institutions; works very closely with students of all ages; inspires coastal communities to take action, advocates for sustainable policies on marine conservation and protection; collaborates with fishermen to encourage sustainable fisheries, and promotes attaining the goals of SDG14 and other relevant interconnected SDGs.**





## **INTRODUCTION**

It is time to protect what is left. We should not repeat our past mistakes. We need to find the answers to questions regarding what we have lost, why, and how we lost them. For this purpose, we conduct studies and we will continue to do so. Among our coasts, there are still ones with untouched natural beauties. Millions of organisms come to the coastal areas to feed and to breed. Lagoons and mouths of streams provide a rich amount of nutrition for marine organisms. Even if we cannot see it right away, the sand we step on is full of life. Fish migrations continue in our straits. We still come across seals in the Mediterranean Sea. We even have otters on our coasts. Dolphins greet us from the boundless blue seas. When we look underwater, we can see the unbelievable allures of life. Seagrasses shelter various organisms. Anchovy is still fished in the Black Sea. Groupers, moray eels, and octopuses are the intriguing guards of rock caves of the Aegean and Mediterranean Seas. But they all depend on our determination: We either decide to study and protect our seas or all of this richness will continue to decline.

We are well aware of the dangers for the seas of Turkey and the surrounding areas: Overfishing, mixed source pollution, invasive species, climate change, and ocean acidification. We can take precautions against these threats only through science and knowledge. We can ensure protection, conservation, and balance by putting knowledge into action, by taking steps towards sustainability. That's why we care deeply about the sustainable development goals of the United Nations, which encompass the importance of seas and oceans.

## TARGETS OF TURKISH MARINE RESEARCH FOUNDATION

### ✓ **Databases**

Finding necessary information is difficult due to the wide range of studies in our seas. For this reason, TUDAV creates a database facilitating a space for information exchange. Databases on ship accidents in the Turkish Straits and Black Sea Bibliography have been established by TUDAV.

### ✓ **Research**

TUDAV supports various studies, especially studies on biodiversity, either with its own resources or by getting in contact with related foundations. For example, TUDAV has a long term, ongoing study on cetaceans in the Turkish Straits.

### ✓ **Publications**

Recent researches are presented both in Turkish and in English. Moreover, guidebooks are prepared with the aim of increasing public awareness. TUDAV has published more than 50 books, becoming a pioneer in marine sciences.

### ✓ **Education**

For TUDAV, it is very important to share the knowledge of our seas with every part of society. Seminars and conservation guidelines have been published and made accessible, especially for fishermen and other interested parties.

### ✓ **Special Protected Areas**

TUDAV's efforts for the establishment of Special Protected Areas continue. Areas such as underwater marine parks help the general public learn about underwater life. TUDAV shares opinions and suggestions of scientists with the relevant authorities.

## 1 PROJECTS

### 1.1 Istanbul Strait Ecological Monitoring Program (1997-Ongoing)

TUDAV has been regularly monitoring the Istanbul Strait via ecologic sampling and monthly gathering of oceanographic data. These data are archived at TUDAV and analyzed by experts. TUDAV's purpose is to showcase the time-related ecological changes in the Istanbul Strait by comparing old data with the new ones. This way, we can find out how and how much do activities like marine traffic and the pollution from the Black Sea affects our straits and, more importantly, what are the chronological changes in the ecosystem caused by some pollutants. TUDAV's works on the straits continue with regular measurements of biological, physical and chemical values. The collected data are meant to be the baseline data for past and future research.

Periodic monitoring and biological sampling efforts concerning marine mammals and marine birds also continue.

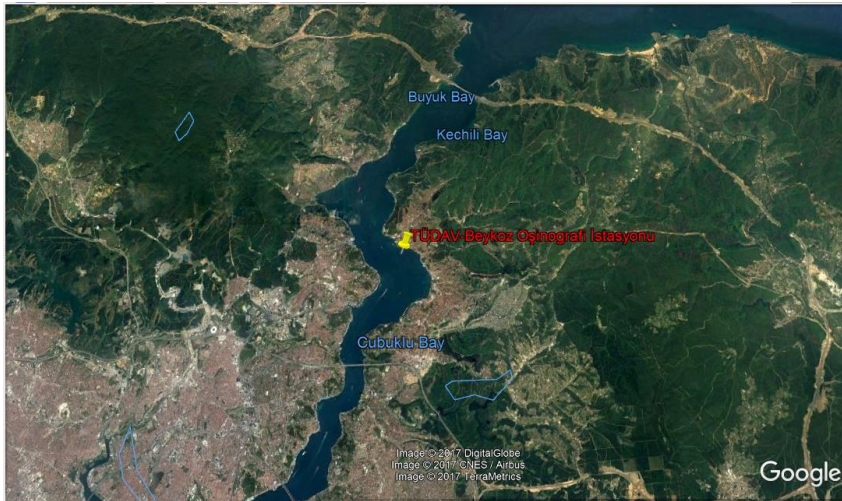


Figure 1- TUDAV Beykoz Research Station in the Istanbul Strait, 2017

## 1.2 Kaş-Kalkan Coastal Zone Protection Project (1999)

The aim of the 1999 Kaş-Kalkan Coastal Zone Protection Project was to gather environmental data and build a database for protection purposes. Environmental issues, fisheries capacity analysis and aquaculture, marine mammals and endangered species, underwater observations, and diving tourism are among the subjects in the project. The study resulted in analyses of Kaş Marina registered vessels and regional fisheries power. 16 fish species belonging to 6 families were found to be widely fished in the region. In the Kalkan region, some of the coralligenous algae were shown to make bioconstruction. Microbiological monitoring of the seawater in the region was undertaken from the records of regional healthcare centre and pollution levels were found to be significantly low by World Health Organization (WHO) standards. Kaş-Kalkan region is one of the prominent touristic attractions, including diving tourism. This project helped determine environmental problems in the region, as well as the current situation and future precautions. The resulting report was presented to government agencies and regional authorities.

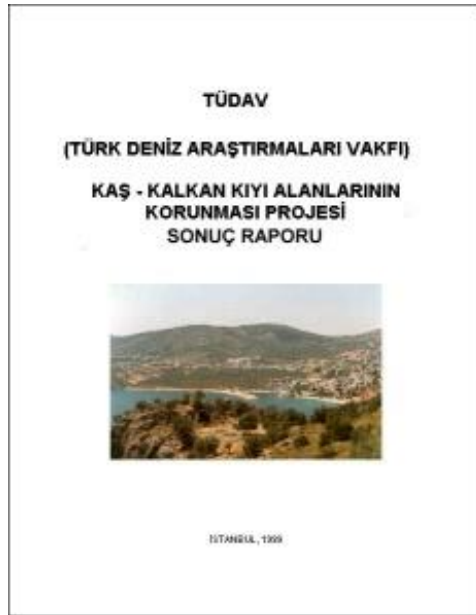


Figure 2- 'Kaş-Kalkan Costal Zone Protection Project' Report, 1999

### 1.3 Gökçeada Marine Underwater Park (1999-Ongoing)

TUDAV has determined that the northern section of Gökçeada between Yıldız Cove and Kuzu Harbour has the properties of a marine park thus, it has to be protected. On 21 February 1999 (official gazette no 23618), the region was closed to all fisheries activities and declared as a marine park in need of protection by the authorities upon TUDAV's request. The coast guard has been monitoring the region ever since. The boundaries have then been widened up to Çiftlik Cove with statement no. 2012/65.

The underwater park consists of multiple zones; a core zone with all activities restricted, and buffer zones with related activities such as swimming, line-fishing, boating, etc. banned.

The island of Gökçeada is an important breeding and spawning area as well as a landmark for migrant marine and land animals. In designating this area, the only one of its kind in our waters, we aimed at protecting species facing extinction, raising awareness about marine and environmental conservation, and conducting scientific research. Many species can be found living in this region.

From 1999 to 2000, conservation and monitoring efforts were effectuated by TUDAV based on voluntary work and donation; this includes taking inventory and follow-up dive sessions for monitoring, a '*Posidonia* Map' created by multiple university clubs, a biological inventory taken with an international team of scientists, and measuring microbiological pollution. Regional fauna has been studied in detail. Additionally, underwater photography competitions were held in 1999, 2005, 2011, and 2016.



Figure 3- Inventory study for Gökçeada Marine Underwater Park, Yıldız Cove, 2000

### 1.3.1 Gökçeada Aphrodite Project (2002 – 2004)

The Aphrodite Project was proposed by UNEP-Regional Activity Centre/Special Protected Areas (RAC/SPA) and implemented with the cooperation of an Italian scientific research institute, Istituto Centrale per la Ricerca Scientifica e Tecnologica Applicata al Mare (ICRAM). The project, beginning in 2002, collected data in Standard Data-Entry Form (SDEF) on habitat and species diversity in specially protected areas in the Mediterranean Sea. As a part of the project, two Turkish scientists were sponsored to go to Italy to learn about underwater sampling. Detailed information on benthic fauna and flora, fish fauna, and habitat diversity on selected sites were gathered. The project also resulted in underwater maps of selected areas.



Figure 4- Gökçeada habitat structure, constructed during 'Aphrodite Project'.

### 1.4 Turkish Straits Database (1997 – Ongoing)

The marine accident database prepared by TUDAV's Turkish Straits Research Group consists of accidents in Istanbul and Çanakkale Straits. Collection and organization of the scattered data sets are beneficial to researchers working on the subject and essential for keeping tabs on shipwrecks.



Figure 5- Nassia tanker accident, Istanbul Strait, 1994 (TUDAV archives)

### 1.5 Ballast Water Control and Management in Ships (1997 – Ongoing)

Ballast water is pumped into the ship's tanks to maintain safe operating conditions throughout a voyage. This practice reduces stress on the hull, provides transverse stability, improves propulsion and manoeuvrability, and compensates for weight loss due to fuel and water consumption.

Unwanted marine organisms, pollution, and contaminated seawaters are transported from one continent to the next, from one ocean to the other because of hundreds of tankers transporting millions of cubic meters of water every day. It is estimated that approximately 3000 marine species are transported each day.

These waters, especially from oil tankers with water output proportional to size and volume, have seen widespread interest and discussions in the maritime and science sectors. Scientists researching the subject discovered that this caused major financial damages.

In November 1997, the International Maritime Organization (IMO) ensured control of origin and analysis of ballast waters with a ballast water plan and analyses requirement as well as by holding port states responsible for potential risks and increased controls. This new development was crucial in terms of raising awareness about the environmental dangers posed by the 50,000 ships crossing the Turkish Straits, as all Black Sea countries including Turkey have been negatively impacted by the highly invasive comb jelly, *Mnemiopsis leidyi*, carried by tanker ballast waters from North American coasts to the Black Sea.

TUDAV became a pioneer on the subject by translating IMO's Resolution A.868 (20) (Guidelines for the control and management of ships' ballast water to minimize the transfer of harmful aquatic organisms and pathogens). The resolution was adopted on 27 November 1997. TUDAV experts participated in international meetings and followed the subject closely in Turkey. A new convention regarding ship ballast waters came into effect in 2017.

The 2002 TBS-made documentary video on Istanbul's ballast water problem with TUDAV's President Prof. Bayram Öztürk is available for viewing on TUDAV's YouTube channel: <https://www.youtube.com/watch?v=F7bkZHcwhb0>.



Figure 6- Tanker traffic and ballast waters from a tanker



## 1.6 Van Lake Studies (2005)

TUDAV focused on the contamination of crude oil and heavy metals. The first step was to analyse carbon and hydrocarbon compounds, detection of 17 compounds in the samples collected at 11 stations by a GC/MS analysis, and demonstrating that the materials in the aliphatic homolog series and the aromatic group compounds belonged to hydrocarbon compounds (crude oil). The second study conducted detected heavy metals and hydrogen sulphur, precipitated sulphur, and thiosulphuric acid S-(2-aminoethyl ester) compounds. The samples collected at depths of 200 to 320 m were studied, only the region and depth-related variations were detected. It is possible that thiosulphuric acid S-(2-aminoethyl ester) is found in the sediment because there are marine species in the lake.

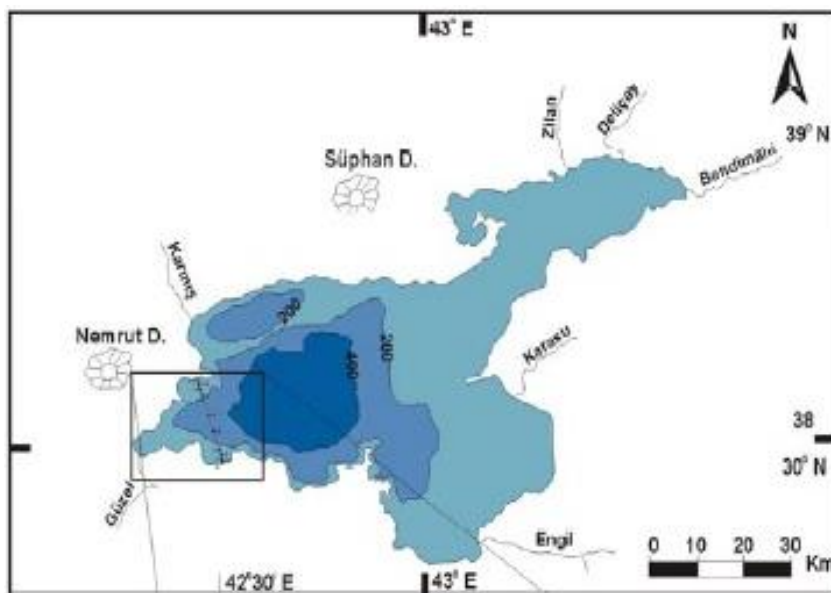





Figure 7- Map of Van Lake and sampling station, 2005

## 1.7 Black Sea Jellyfish Watch Program (2010)

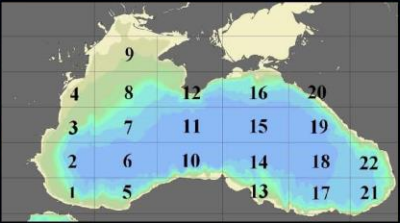
In 2010, a poster was distributed to relevant national organizations in an effort to attract attention to and to gather information on the climate change related increase in jellyfish in the Black Sea.




### INTERNATIONAL BLACK SEA JELLYFISH PROGRAMME



*Pelagia noctiluca*




		9		
4	8	12	16	20
3	7	11	15	19
2	6	10	14	18
1	5		13	17
			21	22




*Chrysaora hysoscella*

#### IS THE NUMBER OF JELLYFISH INCREASING AS THE BLACK SEA IS WARMING UP?


Climate change causes expansion in the range of most species. Jellyfish are among them.  
Please inform us where you see these jellyfish species.




*Cotylorhiza tuberculata*



*Cassiopea andromeda*



*Rhizostoma pulmo*



*Aurelia aurita* (Please don't send information about this species)

**Those typed in red are venomous !**

You can help us by sending us the below information:

- Which one of those species above looks most like the one you saw?
- Date of observation
- Region number (based on the above map)
- Number of animals observed
- Was the species observed alive in the sea or dead and stranded?

This programme is run by  
TUDAV in cooperation with  
the Permanent Secretariat  
of the Commission on the  
Protection of the Black Sea  
Against Pollution.

Please send us information about your observations, with photos where possible, via the below email address.

E-mail: [info@tudav.org](mailto:info@tudav.org)  
Web: [www.tudav.org](http://www.tudav.org)  
Tel: +90 216 424 07 72

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Figure 8- 'International Black Sea Jellyfish Program' poster, 2010

### **1.8 COASTLEARN-BLACKSEA Project (2010 – 2012)**

The COASTLEARN-BLACKSEA Project (Black Sea Integrated Coastal Area Management Education Project), part of Leonardo da Vinci Lifelong Education Programme, was coordinated by Sinop Municipality with the partnership of TUDAV. The project lasted 2 years, occurring simultaneously in Turkey, Bulgaria, and Romania.



Figure 9- 'COASTLEARN-BLACKSEA' meeting, 2010

### **1.9 Black Sea Integrated Coastal Zone Management (ICZM) (2013)**

A year later, the COASTLEARN-BLACKSEA Project was followed by an ICZM meeting that brought together experts from the Black Sea countries to work together on the coastal zone management of the Black Sea.



Figure 10- 'Black Sea ICZM' group meeting, 2013

### 1.10 National Jellyfish and Gelatinous Organism Watch Program - Ya Yakarsa (2014 - Ongoing)

This project aims to photograph alien jellyfish and gelatinous species, by detecting distribution data such as time, place and frequency, and gather the data on a single platform:



**yayakarsa.org**  
Ulusal Denizanası ve Benzeri Türler  
İzleme Programı  
*The National Jellyfish and Gelatinous Organisms  
Watch Programme*

[yayakarsa.org](http://yayakarsa.org). We hope to learn and understand abnormal jellyfish blooms, outbreaks, and their negative impacts on our coasts, moving the subject to a scientific platform and eventually to provide some guidance to decision makers. These jellyfishes and gelatinous organisms clog fishing nets, damaging our fisheries sector. Moreover, venomous species may become a real health hazard for children and the elderly.

This project is a form of citizen science (popular science); scientific data gathered effortlessly and solely for improving public welfare. Some of the data gathered were used in the book 'the Black Sea and Eastern Mediterranean Jellyfish' published by TUDAV.

### 1.11 'Where are the Bonito?' Project (2012-2015)



Through the project 1.11 'Where are the Bonito?', between 2012 and 2015, TUDAV and Metro aimed to protect the bonito, a species with undetermined stocks migrating between the Black Sea and the Mediterranean.

Figure 11- A tagged Bonito about to be released back to the sea.

The goal was to conserve the species by updating the migration routes of the commercially valuable bonito while scientifically contributing to the area of sustainable fisheries. Another goal of the project was to inform fishermen and the public about the bonito.

Tagging took place in the Istanbul Strait, Kilyos, Rumeli Feneri, Şile, Ağva, Samsun, Giresun (Espiye, Tirebolu, Görele), and İzmir (Çeşme). The bonito was tracked, the distance, time between release and eventual catch, was calculated, resulting in valuable data.

The Bonito tagging technique was first used 60 years ago. For this project, a new

and easier tagging method was developed. Fishermen helped with the tagging process. ‘Where are the Bonito?’ project is the first of its kind to draw attention to important matters such as fishing bans, species in need of protection, and marine pollution.



Figure 12- Bonito tagging



Figure 13- ‘Where are the Bonito Project’ brochure, translated into 9 languages

### 1.12 Soft Coral Studies (2015)

The Soft Coral Studies aimed the following:

- Determining the octocorals in the Marmara Sea.

Endangered species, distribution, and density of corals around the islands of Marmara Sea were determined. One new species for the Marmara Sea and 2 new species for the Turkish coasts were recorded for the first time.

- Monitoring the corals in the Marmara Sea.

Coral populations around the Marmara islands are being monitored and mass mortality and its effects have been recorded since 2015.

- Demography of Gorgon facies in the Marmara and Aegean seas.

Gorgon facies have been examined for density, height-frequency distribution, health, and other demographic parameters.

- Genetic structure of Gorgon populations in the Marmara and Aegean seas.

Genetic studies using microsatellites to understand the demography of Gorgon populations has been conducted.

- Restoration effort via transplantation for Gorgon populations

Transplantation of the yellow sea branches damaged by the mass mortality have been undertaken.



Figure 14- Restoration efforts and soft coral samples, 2015



### **1.13 Tropical Signal Studies (2007-2013)**

In 2007, the Mediterranean Science Commission (CIESM) decided to monitor the effects of global warming on marine life in the Mediterranean Sea. The meeting was made possible through the Tropical Signal Program joined by 21 scientists from 15 riparian countries. Long lasting recording devices were deployed in the selected stations within the program and data regarding the species sensitive to global warming were collected.

Microdata loggers (micro-loggers) have been placed every 5 m, from 5 m to 35 m to complete a coastal water temperature profile of the Turkish part of the Mediterranean Sea. The project ended in 2013.



Figure 15- Micro-logger, 2012

## **2 MARINE CONSERVATION STUDIES**

### **2.1 Marine Mammal Studies**

TUDAV has been studying dolphin, whale, and monk seal populations in Turkish waters for more than 20 years. TUDAV's studies focus on subjects such as fisheries interactions, population distribution and density, migration monitoring studies, photo-ID, genetic structure, skull collection, stomach contents analyses, and conservation strategies.

The most encompassing marine mammal skeletal collection has been realized by TUDAV. This collection is of great importance for morphometric studies.

These studies on marine mammals are continuing successfully. Dolphin behaviour and migration in the Istanbul Strait have been monitored since the establishment of TUDAV.



Figure 16- Common dolphins in the Istanbul Strait

#### **2.1.1 Marine Mammal Stranding Network**

TUDAV has been working to locate wounded and/or dead stranded marine mammals along the Turkish coasts since 1996. A database and information network have been formed with the help of fishermen, coastal residents, tourism workers, port authorities, coast guards, and similar organizations. Once tipped, TUDAV experts head to the region and conduct necessary necropsy and sampling. Especially along the coasts of the Western Black Sea, beaches are



scanned regularly to detect dolphin deaths (Figure 16). 800 by-caught dolphins have been sampled until today. 1243 dolphin deaths have been reported between 2003 and 2016 in the Western Black Sea (77% harbour porpoises, 10% bottlenose dolphins, 7% short-beaked dolphins, 6% undetermined). Between 1964 and 2012, only 29 individuals were reported on the coast of the Aegean Sea, which consists of 5 bottlenose dolphins, 6 striped dolphins, 5 Cuvier's beaked whales, 4 Risso's dolphins, 3 harbour porpoises, 2 short-beaked dolphins, 1 false killer whale, 1 sperm whale, 1 fin whale, 1 *Mesoplodon* species.

The Stranding Marine Mammal Network helps us gather comprehensive data about marine mammals stranded on our coasts. A detailed database regarding marine mammal mortality reasons has been created through this network.



Figure 17- Cetacean stranding monitoring



Figure 18- Cetacean stranding network meeting, 1999

A fin whale stranded in Adana in 2000 (Figure 20) and a minke whale stranded in Yumurtalık in 2015 (Figure 21a) were brought to Istanbul for the scientific collection.

The fin whale was buried two days after necropsy and dug up in four days the following year. Having been put together in eight months, the whale has been exhibited since 2002. A special wine was made to commemorate the efforts of volunteers and scientists as well as the life of the whale.



Figure 19- Fin whale skeleton, Science Centre, 2002



Figure 20- Fin whale, Adana, 2000



Figure 21- a) The minke whale stranded in 2015 and b) memorial wine for the study on the stranded fin whale

### 2.1.2 Passive Acoustic Monitoring Studies

There are three living species of Cetacea (whales and dolphins) in the Istanbul Strait (Bosporus), these are; *Phocoena* (harbour porpoise) belonging to Phocoenidae, *Tursiops truncatus* (bottlenose dolphin) and *Delphinus delphis* (short-beaked dolphin) belonging to Delphinidae. It is known that the Turkish Straits System (TSS) is an important migration route between the Aegean Sea and the Black Sea and for the movements of cetacean species associated with pelagic migratory fish species, especially in spring.

With the passive acoustic monitoring method widely used to monitor cetaceans, especially in recent years, the movements of cetaceans have been followed for 24 hours in the Istanbul Strait. In the study where A-tag is used as a passive acoustic system, cetacean sounds are recorded and analyzed in the form of a click train.



Figure 22- Passive acoustic monitoring station in the Istanbul Strait

### 2.1.3 Cetacean Aerial Survey–ACCOBAMS Survey Initiative Project (2018)

The Turkish section of the ACCOBAMS (The Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and contiguous Atlantic area) Survey Initiative (ASI) aiming to determine the distribution and abundance of cetaceans in the Mediterranean Sea has been completed with TUDAV's research and logistic help. The project administration team consisted of prominent Mediterranean institutes and research organizations. The project was financed by the MAVA Foundation, Monaco Prince Albert II Foundation, IFAW, and the governments of Spain, France, Italy, and Monaco.

Fieldwork began in June 2018 and ended in August 2018. Eight airplanes, five boats with passive acoustic monitoring, and more than a hundred scientists from Mediterranean and Black Sea countries were involved. The research conducted simultaneously in the entire Mediterranean is the first of its kind. The project results will provide preliminary data about dolphin and whale abundance and conservation in the region.

Four general board members of TUDAV attended this survey; Dr. Ayaka Amaha Öztürk, Dr. Ayhan Dede, Dr. Arda M. Tonay (Istanbul University, Faculty of Aquatic Sciences), and Dr. Erdem Danyer (Ministry of Agriculture and Forestry, Veterinary Institute). Aside from cetaceans, the observers gathered data on seabirds, sharks, sea turtles, and floating marine litter. The project results will be shared with the public upon completion. Work on the Black Sea section is ongoing.

A short video about the aerial survey initiative is available at the following link:  
<https://www.youtube.com/watch?v=IHDS-aAz7ql>

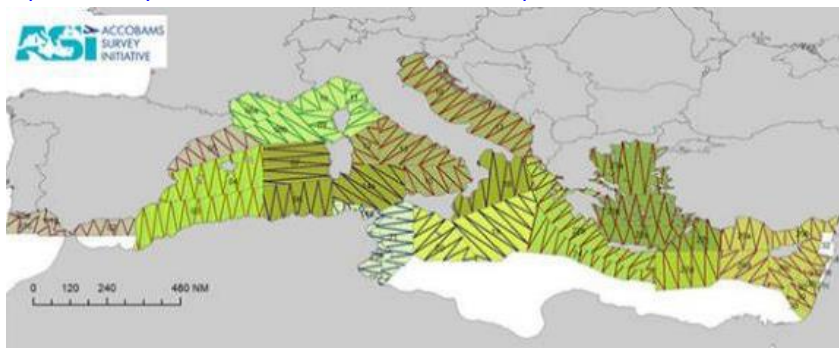


Figure 23- ASI Mediterranean Survey draft map, 2018





Figure 24- Bulgarian and Romanian colleagues and the TUDAV field team, 2018

#### 2.1.4 Mediterranean Monk Seal Studies

Conservation of the threatened Mediterranean monk seal places importance on distribution and habitat conservation in the Aegean and Mediterranean Seas. The Mediterranean monk seal, *Monachus monachus*, though an aquatic mammal, requires terrestrial haul-out sites and caves or caverns to rest and to reproduce. For effective conservation of the species, protection measures should cover both land and sea. This species has primary importance for TUDAV as we have been conducting research on the Mediterranean Monk Seal since the beginning.



Figure 25- Mediterranean Monk Seal *Monachus monachus*

### 2.1.5 Rescued Sperm Whale

A female sperm whale was found entangled in a gill net as a bycatch on 20 June 2002 near Fethiye Gemile Cove, Beş Adalar, Turkey (Aegean Sea). TUDAV was notified by environmentalists and divers. TUDAV experts organized a rescue operation with the help of the Turkish Navy Forces and the animal was rescued in a joint operation, thanks to a special boat named 'Değirmendere'. The whale named 'Ege' was released back to the sea near Fethiye, Aegean Sea. The video about the rescue operation is available for viewing on TUDAV's YouTube channel: <https://www.youtube.com/watch?v=AvjS8sttWI4>



Figure 26- The Sperm whale; TUDAV and SAT commando rescue team, 2002

### 2.1.6 Marmara Sea Cetacean Survey

After 5 days and 600 km surveyed in July 2019, the research expedition on cetaceans in the Marmara Sea was completed. The survey obtained accurate information on the distribution and abundance of cetacean populations in the Marmara Sea. Group sizes of cetaceans were 1 to 18 individuals. The TUDAV-funded expedition resulted in 38 sightings of dolphins and porpoises.



Figure 27- TUDAV team, Marmara Sea, 2019



## 2.2 Guest Speaker Prof. François Doumange

During the visit to Turkey as a guest of TUDAV, Monaco Oceanographic Museum Director Prof. François Doumange gave a seminar in October 2000, at Ataköy Marina Yacht Club, Istanbul.

Prof. Doumange has been the head of the Oceanographic Museum since Captain Cousteau. With more than a hundred scientific articles and nine books, Prof. Doumange's 'Biodiversity and Conservation of the Mediterranean' seminar was met with great interest.

In his speech, Prof. Doumange focused on global warming and its effects on oceanographic coral reefs, 'oceans lungs'. It has been noted that corals live in very specific temperatures and have extreme difficulty coping with sudden changes in water temperature. The speaker has highlighted the fact that if the Mediterranean Sea keeps getting polluted at this rate, a zero-oxygen zone will appear in the western Mediterranean in 40 to 45 years, and in the eastern Mediterranean in 60 years which will make marine life extinct.

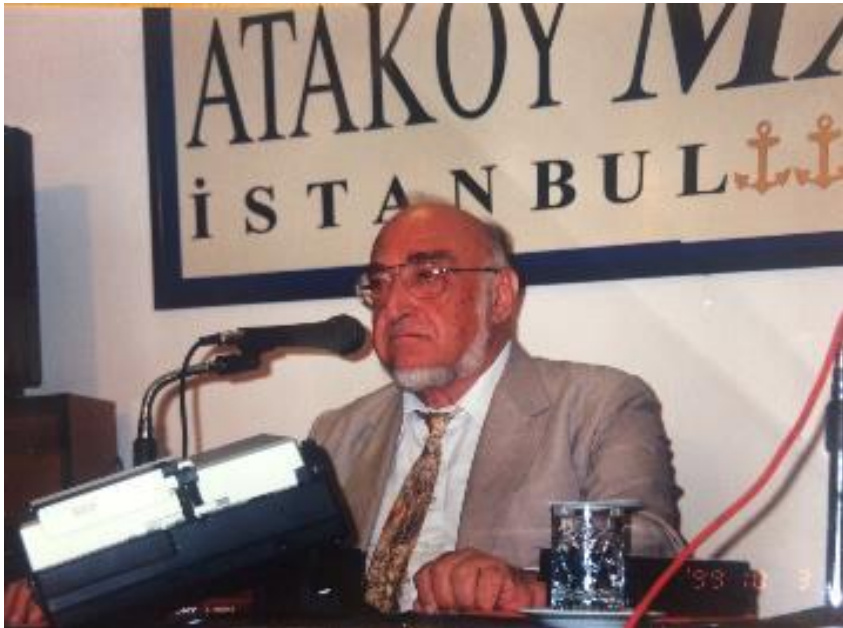


Figure 28- Prof. François Doumange, Ataköy Marina Yacht Club, 2000

### **2.3 Visit to the Last Pound Net**

TUDAV began this activity in May 2001 to protect the traditional fishermen and local culture of fisheries. This activity is in line with Local Agenda 21 prepared by the UNGFC and highlights the fact that the Istanbul Strait is not only a waterway but a facilitator of fishing activities. The agenda supports local people and cultures for sustainable development and environmental management. Regarding local traditional fishermen, line fishermen, baggers, small boat owners, and pound net (set net) residents have been interviewed.

Out of more than hundred places that pound nets have been used, Beykoz remains to be the only area in which the nets are still in use. This activity was named ‘visiting the last pound net in Beykoz’ and realized with the participation of members of the press. Traditional fishing methods have been shared with the participants.



Figure 29- Visiting the last pound net in the Istanbul Strait, Beykoz, 2001

### **2.4 Conservation of the Threatened Sturgeon in the Black Sea**

After having lived in the Black Sea for millions of years, sturgeons are now facing extinction. Illegal fishing takes place from time to time despite a ban on sturgeon fisheries by the government.

TUDAV began a monitoring project in 2004 to evaluate the current situation and to come up with permanent solutions. To inform the fishermen, a 10-minute video was made and distributed to cooperatives. Informational activities included the creation and distribution of posters and booklets as well as t-shirts with the 'Let's Protect the Sturgeon' logo, to the Black Sea fishermen. The residents of the Black Sea region will be able to regain this valuable resource if the young sturgeons are allowed to live. Information provided included the fact that there will be a drastic increase in their numbers and sturgeons will no longer face extinction if the fisheries ban is upheld.

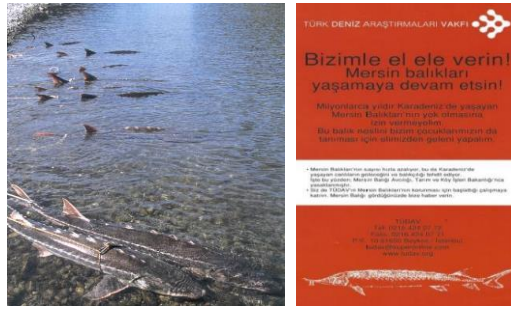


Figure 30- The short film and brochure for 'Threatened Sturgeons in the Black Sea'

## 2.5 Marmaris Maritime Festival

In 2005, TUDAV along with some of the founders, participated in the Marmaris Maritime Festival with a sailboat from İstanbul, a marine pollution panel, and an exhibition onsite. TUDAV's work was exhibited in underwater movies and photographs.



Figure 31- Some of the founders of TUDAV at the Marmaris Maritime Festival, 2005

## 2.6 Protection of the AE2 Submarine

The Australian AE2 submarine has been sunk by the Sultanhisar Torpedo captained by Captain Riza from the Ottoman Empire after having crossed the Marmara Sea in silence. The AE2 wreck is now under protection. TUDAV applied to close off the area around the AE2 submarine wreck to fisheries activities. The request was accepted, and the wreck was spared further damage by fishermen. The wreck and its surroundings (40° 32' 50'' N; 27° 16' 00'' E) were included in the circular no. 37/1, statement of commercial marine and freshwater fisheries in the 2006-2008 period.

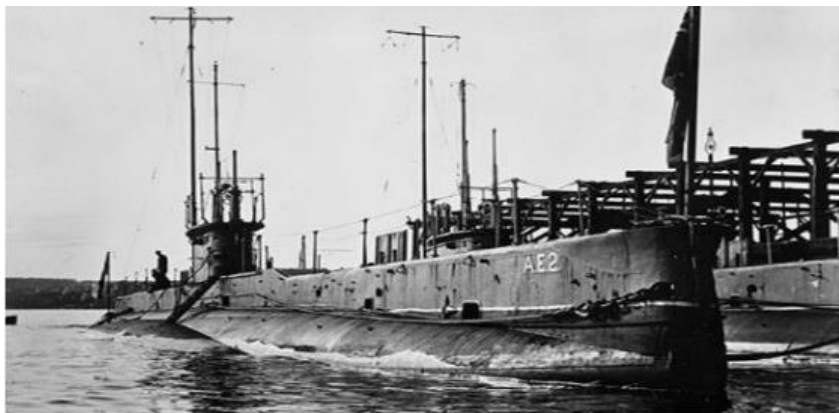


Figure 32- The AE2, an Australian submarine that sunk in the Marmara Sea, 1915

## 2.7 'Don't Drown Fish' Project and Exhibition

TUDAV started a new partnership with Fairy in its 20<sup>th</sup> year. This partnership aims to minimize the effects of phosphate on marine environments, a chemical found in detergents that eventually end up in the seas. In order to draw public attention to the suffocating effect of eutrophication on marine life caused by excess amounts of phosphate, a group of marine enthusiasts tried to hold their breaths underwater. This activity was aptly named 'Don't Drown Fish'.

'Don't Drown Fish' project ended with underwater photographs of celebrities and sea-loving people. These unique photographs were exhibited at various locations.



Figure 33- A Scene from the ‘Don’t Drown Fish Exhibition; some of the Sea-loving celebrities, 2017

## 2.8 World Oceans Day



On the 8 June 2018, World Oceans Day was celebrated at Caddebostan Divers Club in Istanbul with the participation of marine enthusiasts from all around Turkey. As the UN defines, the main focus of the day was to “prevent plastic pollution at sea and encourage solutions

for healthy oceans.” A short film prepared by TUDAV was screened at the event, along with a video message of Peter Thomas, UN Special Envoy for the Ocean. Additionally, the trailer of ACCOBAM’s new international project, ASI-ACCOBAMS Survey Initiative, was screened at the event in order to inform the participants about the contribution of TUDAV as one of the research teams. The project aimed to estimate the abundance and distribution of all cetacean species found in the Mediterranean.

This initiative has been growing to include more than 2000 participants and organizations globally (140 countries), including CSOs, aquariums, museums, universities, youth groups, mariners, divers, swimmers, and public organizations in the marine sector as well as the tourism sector. As it is, World Oceans Day is celebrated each year with various activities, by more and more countries and organizations. TUDAV is the first participating SCO from Turkey. The event website is <http://www.worldoceansday.org>.





Figure 34- World Oceans Day Meeting, Caddebostan Mariners Club, 2018

## 2.9 *Pinna nobilis* Mass Mortality

TUDAV has participated in the regional evaluation process of *Pinna nobilis*, subject to mass mortalities in recent years.



Figure 35- *Pinna nobilis* is one of the endemic protected species in the Turkish seas.

### 3 EU PROJECTS

#### 3.1 Ölüdeniz Conservation Action Plan / LIFE Project (2003-2004)

Ölüdeniz Lagoon, a unique coastal area of the Mediterranean Sea is under enormous pressure from the tourism sector. A conservation action plan was prepared by the city of Muğla, district of Fethiye, Ölüdeniz Tourism Development Cooperative, and Likya World.

The conservation action plan prepared with data from this effort has been evaluated and supported within the EU Life project in 2003. TUDAV has opened an office and a laboratory in Ölüdeniz in the scope of this project. Final reports and all educational research are available on the website: <http://www.tudavoludeniz.org>.

Ministers, local governors, and the president of TUDAV attended the opening ceremony of the office and laboratory in the municipality of Ölüdeniz, Kumburnu entrance.



Figure 36- TUDAV Ölüdeniz Laboratory opening, 2003

Ölüdeniz conservation action plan included the following subjects:

- Monitoring microbiological pollution of seawater and detecting sources of discharge,
- Taking dissolved oxygen measurements to determine sources of organic pollution,
- Determining the reasons for frothing in some areas in the sea and the Ölüdeniz Lagoon, and taking necessary precautions,
- Monitoring wastewater discharge from daily tour boats and commercial boats,
- Analysing of solid waste collection, recycling and disposal systems,
- Understanding decreases in water levels in the Ölüdeniz Lagoon and coastal management,
- Analysing of an appropriate central water treatment technology and proposing a master plan for a sewer system,
- Holding educational seminars for tourism workers and yacht owners.
- Finalizing a conservation action plan and presenting a report to the relevant authority.



Figure 37- Ölüdeniz Second National Underwater Photography Contest, 2004



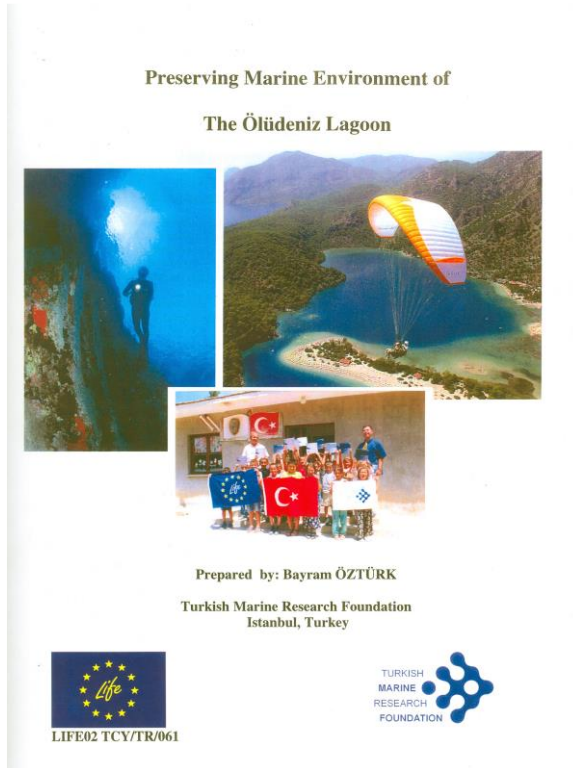


Figure 38- Educational publications during the 'LIFE Project' for Ölüdeniz Lagoon

'Our seas' for children and 'Marine organisms guide' for adults have been published in the scope of the Ölüdeniz Project. Included in the series were 'Butterflies of the butterfly valley' and 'Butterfly valley plant guide' as Ölüdeniz is an important habitat with many endemic species.



Figure 39- 'LIFE Project' Symposium announcement, 2005

TUDAV has organized a 2-day-long symposium with Hisar Front Centre and REC (Regional Environmental Center). Environmental problems threatening the region were discussed.

### 3.2 MARLISCO Project (2012-2015)

#### **'Together for Litter-free Seas'**

MARLISCO Project (Marine Litter in Europe Seas: Social Awareness and Co-Responsibility) is a European Union (EU) project aiming to battle marine litter through social responsibility and public conscience. The project can be found at <http://www.MARLISCO.eu/>.

On 26-27 July 2012, MARLISCO Project was successfully kicked off in Brussels, Belgium spearheaded by the European Commission DG Research and Innovation. With the Italian Teramo Municipality in lead, 20 partners participated in the project and TUDAV was the Turkish counterpart.

The main objective of the MARLISCO project is to create a joint consciousness and increase awareness of the consequences of societal behaviour in relation to waste production and management on marine socio-ecological systems, to promote co-responsibility among different actors, and to define a more sustainable vision on marine litter in European seas. The MARLISCO project has organized various efforts and activities across 15 European countries. These efforts and activities involved different stakeholders such as the industry, waste management and recycling sectors, regional commissions, EU representatives, local municipalities, citizens, environmental NGO's, schools, and scientists.



Figure 40- 'MARLISCO Project' workshop, İstanbul, 2012

12 countries held national debates within the scope of the project. Activities included a video contest, educational activities for school students, and exhibitions to raise the awareness of the public.



Figure 41- 'MARLISCO Project' Marine Litter Awareness Exhibition, 2014



Figure 42- 'MARLISCO Project' short video contest and young environmentalist producers, 2013

Multimedia tools were effectively used to reach large masses. A MARLISCO European Video Contest was organized and winners received prizes; leading stakeholders to seek novel approaches and innovative solutions for marine litter in an integrated manner.

A Marine Litter Awareness Raising and Education Workshop for Educators was organized in 2015.



### 3.3 Gökçeada Marine Park Underwater Trail – EU Project (2016-2017)

Gökçeada Marine Underwater Park project has been financed by the Republic of Turkey and the European Union in the scope of ‘Civil society dialogue’ in 2016 and coordinated by TUDAV. The French environmental organization BiEAUdiversite offered environmental consulting services for the project.

All over the world, locals were presented with an opportunity to learn about underwater marine life through underwater trails built in protected areas. Gökçeada Marine Underwater Park in Yıldız Cave, with its underwater trail and nearby building, offers its guests the opportunity to observe marine life in situ with the guidance of a park ranger. Visitors can follow buoys along the underwater trail by swimming with dive equipment like snorkels and fins. Informational signposts along the trail and coasts provide information on marine life from five different habitats in the region (<http://gokceadasualtiparki.org>).



Figure 43- Gökçeada Underwater Trail signpost and the project team, 2017

### 3.4 Black Sea Watch (2016-2017)

'Black Sea marine environment research with public participation' (Black Sea Watch) was financed by the European Union (EU) and the Republic of Turkey in 2017. The NGO Green Balkans and TUDAV partnered up for this reason for 12 months. The project aimed to communicate the importance of marine biodiversity in the Black Sea through heightened public awareness and increased public participation via a community-led biodiversity data collection. Within the scope of the project, an application for smartphones and a web-based database introduced marine animals to the general public. Collection of information such as texts, maps, and pictures for building new applications for smartphones and the web-based database, organizing multinational workshops for consultation on gathered data, promotion of the newly developed tools, the publication of a booklet on environmental education on Black Sea biodiversity as well as a leaflet presenting project outputs and testing of the created tools by the general public were the main activities for this project.

The newly developed tools have been promoted by several public events like 'Science cafés' for adults as well as summer schools for the youth and students. The details of the project can be found at the following link: <http://www.blackseawatch.org>.



Figure 44- 'Black Sea Watch' was a popular science project, 2017.

### 3.5 Climate Change Adaptation in the Seas and Coasts of Antalya/Mediterranean Sea (2017-2019)



Figure 45- Antalya/Mediterranean Sea Climate Change Project

'Climate Change Adaptation for the Sea and Coasts of Antalya' lead by Antalya Metropolitan Municipality and in the partnership of TUDAV, was financed by the European Union (EU) and the Republic of Turkey within the framework of Capacity Building in the Field of Climate Change in Turkey Grant Scheme. The 2-year project began on 15 September 2017 and focused on the preparation of a risk management strategy against the impacts of climate change on the sea and coasts of Antalya. The Project included numerous activities to raise awareness on the conservation of biodiversity, fisheries, archaeology, and tourism, as well as Antalya's historical and natural heritage. Antalya's residents and future generations inheriting the natural and historical riches of Antalya are the beneficiaries of this project.

As a major economic centre, Antalya's riches, residents, and environment are vulnerable to the negative effects of climate change such as rising sea levels, worsening weather conditions, floods, heatwaves, increase in water temperatures, etc. Negative effects brought on by climate change can affect the economy, environment, social wellbeing, and public health. Although the focus of this project was on Antalya, the project is an example for other coastal regions in the Turkish part of the Aegean and Mediterranean Seas.

### **3.5.1 Marine Surveys (2018-2019)**

Two marine surveys of the Climate Change Adaptation for the Sea and Coasts of Antalya Project have been completed. Data on regional sensitive habitat structure, marine biodiversity, density, and distribution of invasive species were gathered by aquatic scientists during winter dives. Information on the rise in sea levels, acidification, increase in water temperatures, and changing climate conditions were gathered as well.



Figure 46- Marine Survey dive and photographing the invasive pufferfish, 2019

### **3.6 ANEMONE Project (2018-2021)**

ANEMONE (Assessing the vulnerability of the Black Sea marine ecosystem to human pressures) Project aims to assess the status of the Black Sea, through collaborative efforts and harmonized methods among several partners including TUDAV.

#### **3.6.1 ANEMONE Joint Western Black Sea Cetacean Survey**

ANEMONE project has completed one of its core activities, the Black Sea joint scientific cruise. A team of 17 marine scientists from 4 countries (Bulgaria, Romania, Turkey, and Ukraine) onboard the research vessel “Mare Nigrum” acquired samples from water, including sediments and marine organisms to assess the ecological health of the Black Sea. Marine mammals, birds, and floating litter observations were made by TUDAV and the NGO Mare Nostrum.





Figure 47- 'ANEMONE' Joint Scientific Cruise, 2019

### 3.6.2 ANEMONE Project Cetacean Monitoring Survey

A cetacean survey in the Western Black Sea was conducted for TUDAV's EU funded 'Assessing the vulnerability of the Black Sea marine ecosystem to human pressures' (ANEMONE) Project.

The research expedition surveyed 600 km and lasted 8 days. Funded by the ANEMONE project, the expedition aimed to obtain accurate scientific data on the abundance and distribution of cetaceans in the Black Sea. Data on floating marine litter during the survey was also collected.

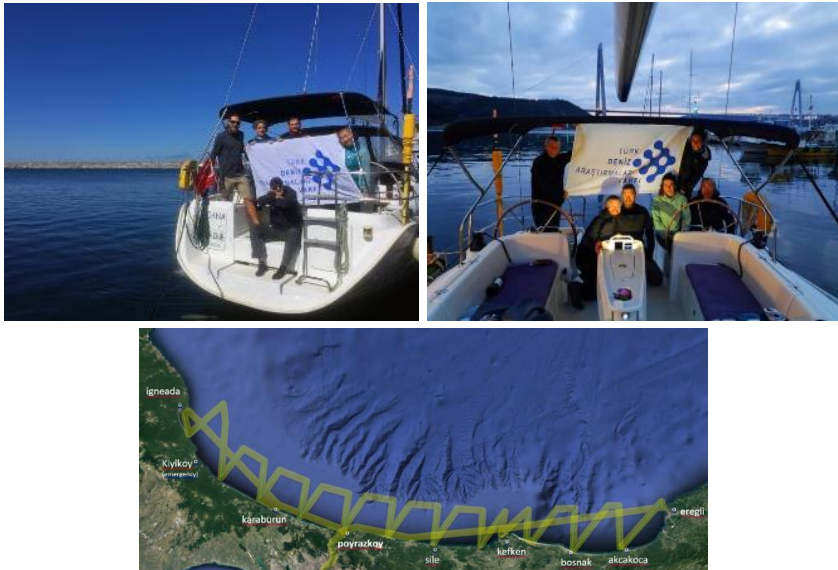


Figure 48- TUDAV team on the boat and survey plan of the cruise, 2019

### 3.7 CeNoBS Project (2019-2021)

Marine Strategy Framework Directive (MSFD) represents the pillar of the European Union, aiming for “Good Environmental Status” (GES) in European marine waters by 2020. TUDAV is a partner of the CeNoBS (Support MSFD Implementation in the Black Sea Through Establishing a Regional Monitoring System of Cetaceans (D1) and Noise Monitoring (D11) for Achieving GES) Project. Beginning on January 2019, with the leadership of Mare Nostrum NGO, the two-year project aims to collect baseline data on the distribution and abundance of the Black Sea cetacean populations, bycatch pressure, and to implement effective noise monitoring in the region. In line with ASI, the aerial survey was made in the waters of Bulgaria, Georgia, Romania, Turkey, and Ukraine for the first time with such a large scale of the international cooperation.



Figure 49- CeNoBS kickoff meeting and aerial survey team photo

#### 4 ANTARCTICA EXPEDITION

In 2014, TUDAV president Prof. Bayram Öztürk joined the 56<sup>th</sup> Japanese Antarctic Expedition by the National Institute of Polar Research as a guest researcher and gained experience in logistics and planning. The team of 241-people including 71 researchers took measurements from Australia, the Southern Ocean, and Antarctica, finalizing the endeavour in 2015. In 2017, TUDAV's vice-president Dr. Arda Tonay was invited to join the 22. Ukrainian Expedition as a researcher and travelled to the Vernadsky station to study the humpback whales.

The first Turkish Antarctic Expedition in 2016 was carried out by 13 Turkish scientists, including two female scientists, from 7 different universities. During the expedition, research on climate change, sea ice, alien species, pollution, marine biodiversity, protected areas, marine mammals, and botanic was conducted. In 2015, representatives of Ukraine and Turkey signed a Memorandum of Understanding (MoU) between the National Antarctic Scientific Centre of the Ministry of Education and Science of Ukraine (NASC) and its Turkish counterpart, TUDAV. The MoU established a framework of cooperation on the basis of equality and mutual benefit in the field of polar research for the expedition.



Figure 50- Antarctic Scientific Research Expedition, 2016



Figure 51- Prof. Bayram Öztürk, Japanese Syowa Station, 2015



Figure 52- Dr. Arda Tonay in the 22<sup>nd</sup> Ukrainian Expedition, 2017

There are 101 research stations (all parties to the Antarctic Treaty) in Antarctica. The establishment of a Turkish Antarctic research station is supported by TUDAV, but involvement in noteworthy research projects is necessary for the Republic of Turkey to have permanence in Antarctica.





Figure 53- Antarctica research expedition, TUDAV team, 2016

## 4.1 Antarctica Science Program

### 4.1.1 First Antarctica Workshop

TUDAV organized a meeting on 23 February 2013 to discuss the establishment of a Turkish Antarctic research base, although the Turkish Government did not show interest in the Antarctic at that point. In this meeting, Turkey's procedure about Antarctica, the legal infrastructure, the writing of the Turkish Antarctic science program, and a potential scientific meeting were the topics of discussion.

Turkey's numerous scientific achievements and the wide range of available scientists have given us the courage to organize the first workshop on 30 April 2013. All the actors gathered to exchange information and to elaborate a science policy which was later presented to relevant authorities.



Figure 54- Participants of the Turkish Antarctic Research Base Workshop participants and Proceedings, 2013

### 4.1.2 Turkish Antarctic Program Roadmap Workshop

'The Turkish Antarctic Science Program Roadmap Workshop' was organized by TUDAV at the Chamber of Shipping, Istanbul on 18-19 November 2013. During the workshop, various aspects of being a part of the Antarctic scientific program including logistics, infrastructure, research vessels, budget, legal matters, and international cooperation were discussed, and a guideline was drafted. Numerous Turkish scientists also made contributions to successfully write the

road map. Additionally, 4 Antarctic experts made valuable contributions by sharing their experiences: Prof. Jeronimo Lopez-Martinez, the President of Scientific Committee on Antarctic Research (SCAR); Prof. Kentaro Watanabe from the National Institute of Polar Research, Japan; Prof. Alan Rodger the Director of the British Antarctic Survey and Prof. Marcel Nicolaus from the Alfred Wegener Institute, Germany.



Figure 55- Turkish Antarctic Program Roadmap Workshop, 2013

TUDAV made a substantial effort in the signing of the Madrid Protocol in 2017, helping the Republic of Turkey on its way to build a base in Antarctica.

#### 4.1.3 Antarctica Photograph Exhibitions

Two exhibitions were organized in Antalya and Istanbul in order to show the beauty and vulnerability of Antarctica.



Figure 56- Boat Show, Istanbul, 2016 and the poster for the Antarctica exhibition in Antalya



Figure 57- 'Reflections from the White Continent Antarctica Exhibition' with 15 photos from TUDAV's Antarctic expeditions (2014-2016), Antalya Municipality Marine Biology Museum, 2016



## 5 SYMPOSIUMS

TUDAV has organized various symposiums since its establishment.

### 5.1 Beykoz Environmental Problems Symposium

Beykoz is a district of Istanbul that has a beautiful shoreline and forests. But its coast is threatened by heavy marine traffic and industrial buildings. Beykoz District Symposium on Environmental Problems took place in June 1998, to draw attention to the environmental degradation and pollution while discussing potential solutions. A proceeding book have been published on the subjects of noise and air pollution, sewer system, problems with drinking water, wildlife, fresh water sources, geological structures, marine traffic, marine pollution, diving, ecotourism potential, memorial trees, forest areas and social structure.



Figure 58- Beykoz Environmental Problems Symposium Proceedings book and the poster of Symposium, 1998

## 5.2 International Aegean Sea 2000 Symposium

The Aegean Sea sets the Western borders of Turkey; thus, it is an area where we connect to Europe. In this way, it is politically and strategically crucial. Following this train of thought, TUDAV has organized an international platform ‘Aegean Sea 2000 Symposium’ to discuss historical, geographical, legal, and environmental matters of the Aegean Sea. Over 30 experts from various fields have presented their work to be discussed during the meeting in Bodrum, on 5-7 May 2000. The meeting was finalized with discussions on problems of the Aegean and their solutions. With the participation of media as well as regional governments and private organizations, the Aegean Sea Symposium became home to interdisciplinary discussions. The symposium facilitated much needed discussions on issues such as environmental problems, fisheries, geological structure, oil sources in the region, and legal matters like coastal waters, continental shelf, security, and marine transportation.



Figure 59- Invited speakers, Prof. John Van Dyke and Prof. Tulio Scovazzi at International Aegean Sea 2000 Symposium, 2000



Figure 60- International Aegean Sea 2000 Symposium Proceedings, Prof. Aslan Gündüz and Judge Park (ITLOS) and the symposium participants, 2000

### 5.3 The Marmara Sea 2000 Symposium

The Marmara Sea 2000 Symposium was held in Ataköy Marina, Istanbul on 11-12 November 2000. Together with 62 scientists, and Prof. Ramazan Mirzaoğlu, the Government Minister, and Mr. Ediz Hun, the president of the Environment Commission of the Turkish Grand National Assembly (T.B.M.M), this symposium facilitated a place to presenting statements and ideas about the Marmara Sea.

Participants highlighted the importance of a meeting for the Marmara Sea and Straits and noted the urgent need for it. The symposium focused on marine law, marine transportation, management of straits, marine geology and geophysics, atmospheric effects, physical and chemical oceanography, biodiversity, prevention of marine pollution, and management of natural resources, with 59 presentations. Finalized with a discussion panel on 'Marmara Sea Conservation Action Plan', the symposium resulted in 607-page proceedings book published by TUDAV.



Figure 61- Minister Prof. Ramazan Mirzaoglu and Proceedings, 2000



Figure 62- Participants of the Marmara Sea 2000 Symposium, 2000

#### **5.4 Problems of Regional Seas 2001 Symposium**

An international symposium on the problems of regional seas, focusing on the Black Sea, the Turkish Straits System, the Aegean Sea, the Mediterranean Sea, and the nearby Caspian Sea, was organized on 2-4 May 2001, Ataköy Marina, İstanbul. The second international symposium organized by TUDAV has seen 24 presentations made by more than 30 scientists from 26 countries. The subjects included: the Caspian Sea, energy sources, status and problems of the Caspian Sea, Black Sea and the Azov Sea, Turkish Straits, the Aegean Sea, legal matters, Aegean problems and solutions, and the protection of the Mediterranean Sea. The protection and safety of the Turkish Straits were matters of great importance discussed during the symposium, which was disseminated to the public through media.





Figure 63- Problems of Regional Seas 2001 Proceedings, Prof. Kosta Ifantis (top right); Prof. Bernard Oxman (middle left) and Judge Prof. A. Yankov (ITLOS) and Prof. Öztürk (bottom left and right respectively), 2001



Figure 64- Prof. Eric Franckx (top); Judge Prof. David Anderson (ITLOS) and Prof. Rainer Lagoni (middle right and left respectively) and Participants of the Problems of Regional Seas 2001 (bottom)

## 5.5 Symposium on Aegean Continental Shelf and Related Problems

Symposium on the Aegean Continental shelf and Related Problems' was organized on 4-15 December 2002 and the proceedings were published. A wide range of subjects included a chronological view of Aegean problems, coasts and continental shelf, maritime jurisdiction and sovereignty, declaration of exclusive economic zones, natural protrusions in the Aegean Sea, formations to limit the coastal shelf, Turkish and Greek perspectives, the decisions of the International Court of Justice, and cases closed as well as the effects of Aegean Sea disputes on the Mediterranean Sea.

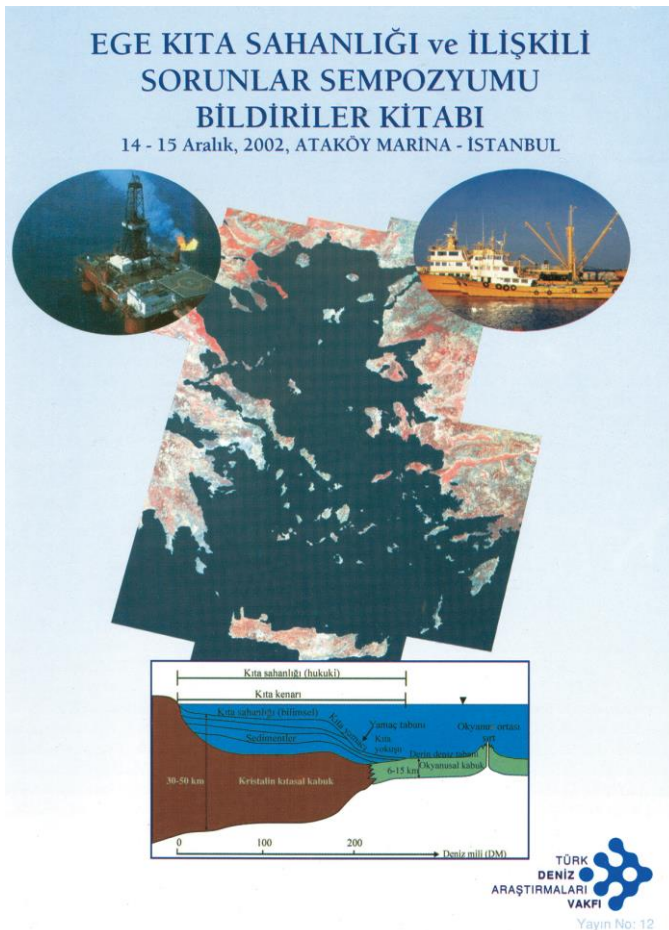


Figure 65- Proceedings of Symposium on Aegean Continental Shelf and Related Problems, 2002



## 5.6 Symposium on the Straits Used for International Navigation

The Symposium on the Straits Used for International Navigation took place in Ataköy Marina, Istanbul on 16-17 November 2002. Numerous experts participated in the symposium and focused on the problems of the straits with an emphasis on the Istanbul Strait. The shipping industry, marine protected areas, national and regional protection politics, and safety were also discussed. As the number of ships rose from 4500 to 50,000 since the Montreux Convention (1936), so did perilous accidents.



Figure 66- Symposium on the Straits Used for International Navigation Proceedings, some of the invited speakers- Judge Prof. Alexander Yankov (ITLOS), Prof. Jon M. Van Dyke, Prof. Bayram Öztürk and Prof. Bernard Oxman, and all participants, 2002

## 5.7 The 2<sup>nd</sup> National Aegean Islands Symposium

Exploring the Aegean Islands historically, legally, and sociologically, the symposium held in Gökçeada, Çanakkale, on 2-3 July 2004, shone a light on life on the islands during the Ottoman Empire. The book on the symposium explores the legal problems at the Aegean Sea and focuses on equitable solutions for the Aegean issues.

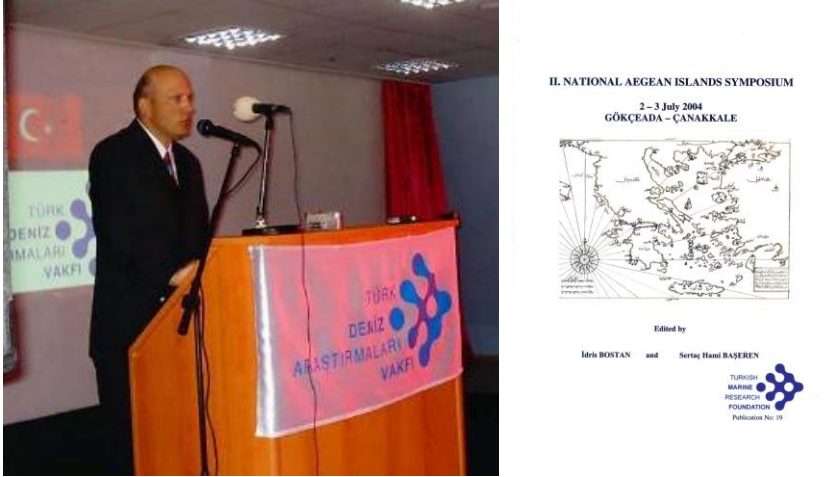


Figure 67- The 2<sup>nd</sup> National Aegean Islands Symposium opening speech and proceedings book, 2004

## 5.8 The 38<sup>th</sup> CIESM Congress

TUDAV has participated in the CIESM (International Mediterranean Science Commission) congress that took place in Istanbul on 9-13 April 2007 with great effort and interest. TUDAV contributed by sponsoring some of the works. The prestigious Mediterranean marine congress occurred with the participation of 850 marine scientists from all over the world including 187 Turkish scientists.



Figure 68- CIESM Congress Program booklet, during a press conference - Prof. Bayram Öztürk, Minister of Transportation Mr. Binali Yıldırım, Prince of Monaco II. Albert and Director of CIESM Prof. Frederic Briand, 2007

## 5.9 Conference on Mixed Gas Diving

Dick Clarke's talk titled 'Mixed Gas Diving - What if we dive deeper? What if we stay longer' was co-sponsored by TUDAV and took place at the Ataköy Marina, Istanbul on 28 November 2007. This intriguing subject of mixed gas usage diving has attracted the attention of more than a hundred participants.

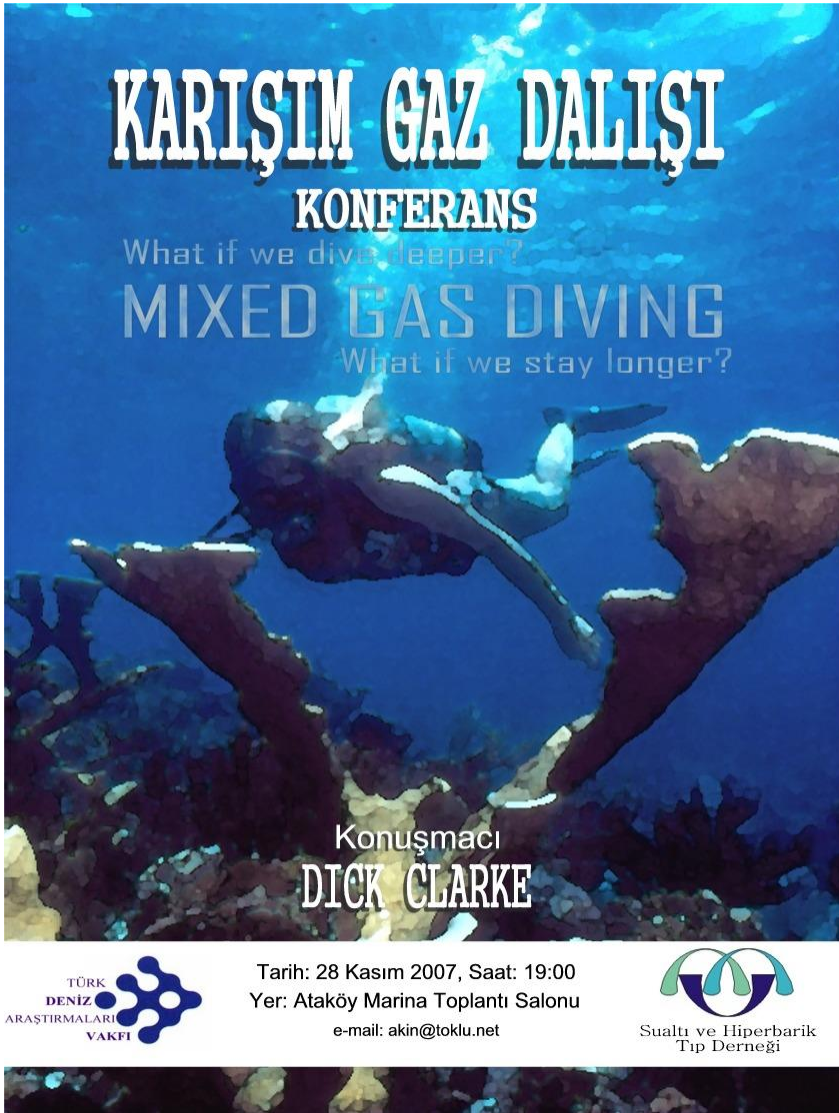


Figure 69- A poster of Mixed Gas Diving Conference, 2007



### 5.10 The 23<sup>rd</sup> Annual Conference of the European Cetacean Society (ECS)

Hosted by TUDAV, the 23<sup>rd</sup> Annual Conference of the European Cetacean Society (ECS) took place in Istanbul on 2-4 March 2009.

Attended by nearly 500 marine mammal scientists and students, the main themes were climate change and marine mammals but covered other topics as well.



Figure 70- ECS conference abstracts book and participating students, 2009



Figure 71- ECS conference opening speech and the venue, 2009

### 5.11 Towards Better Management of the Mediterranean

With the aim of facilitating better management of the Mediterranean Sea, a meeting was organized by TUDAV with the collaboration of IUCN, PNUE, RAC/SPA, and Agence des Aires Marines Protégées (AMP) in Istanbul on 21-23 January 2010. Reputable scientists of the Mediterranean countries participated in this meeting. At the end of the meeting, precautionary measures for the effective management and conservation of the Mediterranean Sea were elaborated and communicated to the relevant countries.



Figure 72- 'Towards Better Management of the Mediterranean' meeting, 2010

## 5.12 The Marmara Sea 2010 Symposium

More than 150 people and representatives participated in the Marmara Sea 2010 Symposium, organized in İstanbul, on 25-26 September 2010. 63 scientific papers were presented, and the proceedings were published.



Figure 73- Marmara Sea 2010 Symposium Proceedings and the participants, 2010

Prof. Nadia Pinardi and Mr. Kerem Kemerli were the keynote speakers of the symposium. Prof. Pinardi's speech was about Marsilli's observations and studies on the water budget and currents of the Turkish Straits. Beginning in 1681, the oceanographic studies of Marsilli are assumed to be the first in the world. Mr. Kerem Kemerli talked about the petrol cleaning process in Mexico Bay, classified as the biggest oil leakage of the last century.

Governmental institutions also participated in the symposium. The Bluefish Conservation Campaign received valuable support, as a special session was organized on the bluefish subject. Experts pointed out the extent of pollution, mucilage formation, bacteria contamination, and its possible threats to public health. It was agreed that fishing activities in the Marmara Sea are a threat to marine biodiversity and overfishing, and that illegal fishing should be prevented. Moreover, a consensus was formed on how illegal trawl fishing should be controlled and marine protected areas should be established.

Participants agreed to establish an action plan for the protection of the Marmara Sea involving all stakeholders. It was also highlighted that protecting the Marmara Sea would also contribute to the protection of the Black Sea and the Mediterranean Sea.



### 5.13 The Istanbul Fisheries Council

The Istanbul Fisheries Council organized by TUDAV and the Sarıyer Municipality took place in Istanbul on 26 December 2010. A variety of subjects were discussed including pollution, overfishing, management, cooperative and union issues, fisheries in the Istanbul Strait, fish processing, aquaculture and fisheries problems, EU Acquis on fisheries and compliance issues, fishermen training, and education.



Figure 74- The Istanbul Fisheries Council, 2010

### 5.14 The First Conference of Marine Sciences in Turkey

The first "Marine Science Conference of Turkey" was organized on 31 May-3 June 2016 by METU. TUDAV was one of the sponsors and screened a video on the first Turkish Antarctic expedition.

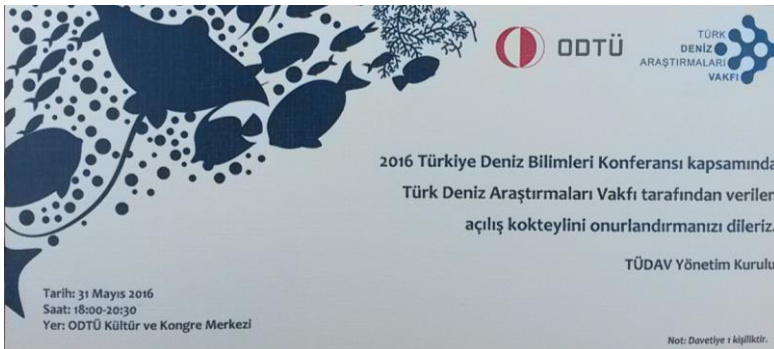


Figure 75- The invitation of the Conference opening, 2016

### 5.15 The 7<sup>th</sup> Session of the Contracting Parties of ACCOBAMS

The 7<sup>th</sup> Meeting of ACCOBAMS was held in Istanbul on 5-8 November 2019. With contributions from 24 countries and one week of intense discussions, effective measures for cetacean conservation were adopted.

During the pre-event, the preliminary results of the ACCOBAMS Survey Initiative (ASI) in the Mediterranean and the Black Sea were presented.

A book summarizing TUDAV's cetacean studies in Turkey was presented at a side event on the second day.



Figure 76- ACCOBAMS MOP 7, 2019

### 5.16 Marine Key Habitats & Non-Indigenous Species (NIS) Symposia

On 14-18 January 2019, scientists from all over the Mediterranean region have met in Antalya for knowledge exchange on conservation of marine biodiversity and to ensure enhanced cooperation for achieving improved environmental conditions in the Mediterranean Sea. The symposia, financed by the MAVA Foundation and the Mediterranean Trust Fund was organized by the Specially Protected Areas Regional Activity Center (SPA/RAC), the Mediterranean Biodiversity Centre of Mediterranean Action Plan of the Barcelona Convention in collaboration with the Turkish Ministry of Environment and Urbanization, and the TUDAV.



Figure 77- An invitation to a gala dinner for the Symposia

The symposia provided an opportunity to exchange the most recent scientific data on marine biodiversity conservation while promoting cooperation between specialists working on the Mediterranean Sea.



Figure 78- The participants of the Key Habitats and NIS Symposia, 2019

### 5.17 The 2019 Beykoz Symposium

Beykoz, a district of Istanbul with a history going back centuries, has entered an era of development and industrialization in the 19<sup>th</sup> century. Organized by the Beykoz Municipality 6-8 December 2019, this most recent Beykoz Symposium has looked at the economic, demographic, and political development and environmental problems in the district.

As TUDAV, we talked about the importance of fisheries, marine transportation, and shipping as well as marine and coastal tourism in Beykoz. Water treatment issues, overfishing, ghost fishing, noise contamination, invasive species, oil spills, and marine pollution were some of the problems included in TUDAV's speech. Climate change and loss of biodiversity were also mentioned.



Figure 79- TUDAV presentation at Beykoz Symposium, 2019

### 5.18 World Marine Mammal Conference

The Annual Conference of the European Cetacean Society (ECS) and the Biannual Marine Mammal Conference by the Society for Marine Mammalogy (SMM) were converged into World Marine Mammal Conference in Barcelona, Spain on 9-12 December 2019.

We had 5 poster presentations at this conference. The conference included 45 workshops, more than 600 presentations, and over 1000 poster presentations with more than 2600 participants.

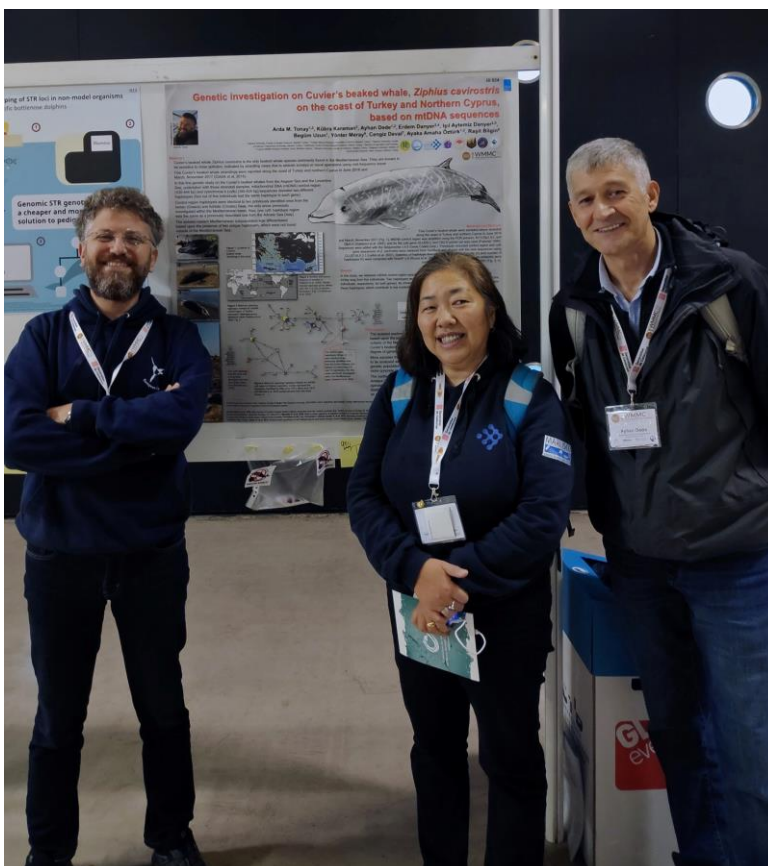


Figure 80- TUDAV participants at the World Marine Mammal Conference, Barcelona, 2019



### 5.19 The 2<sup>nd</sup> National Symposium on Monitoring and Evaluation of Seas

The 2<sup>nd</sup> National Symposium on Monitoring and Evaluation of Seas was held on 11-13 December 2019 in Ankara. TUDAV's cetacean monitoring activities and its early Aegean Sea oceanographic studies in were presented while also contributing to the symposium with a 15-photograph exhibition titled 'Let's Discover Turkish Seas'. The symposium was overseen by the Ministry of Environment and Urban Planning and TUBITAK Marmara Research Center, and attended by representatives from more than 50 universities. As the only civil society organization in attendance, TUDAV's studies were met with great interest.



Figure 81- 2<sup>nd</sup> National Symposium on Monitoring and Evaluation of Seas and TUDAV'S photo exhibition, 2019

## 6 WORKSHOPS

### 6.1 The Workshop on Lessepsian Migration

Lessepsian migration gained importance due to alien species in the Mediterranean Sea. The workshop took place on 20-21 July 2002 in Gökçeada. It strived to unite a multinational team of scientists for information exchange, to create a database on tracking alien Indo-Pacific species and their negative impacts on the marine environment, as well as to discuss future efforts.

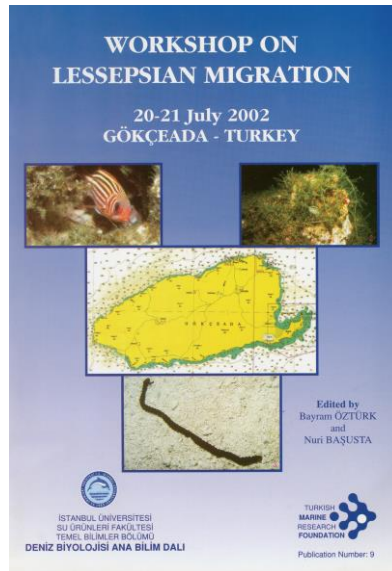


Figure 82- Proceedings book of Workshop on Lessepsian Migration, 2002

### 6.2 The Workshop on Farming, Management and Conservation of Bluefin Tuna

TUDAV's workshop, organized on 5-7 April 2003 in Ataköy Marina, Istanbul oversaw discussions on the economically important bluefin tuna. The topics were bluefin tuna's biology, migratory routes, fisheries stocks, fisheries management, ICCAT's applications, applying quotas to conserve stocks, aquaculture, choosing appropriate sites for farms, pollution-tracking, and the effects of farming on wild populations. As the bluefin tuna became a globally important species in recent years, numerous farms were built in the



Mediterranean Sea. Tuna farming gained global importance, despite a serious lack of information about the effects on local flora and fauna. Scientists, fishermen, businessmen, decision makers, and other shareholders came together for information exchange on the management of bluefin tuna.

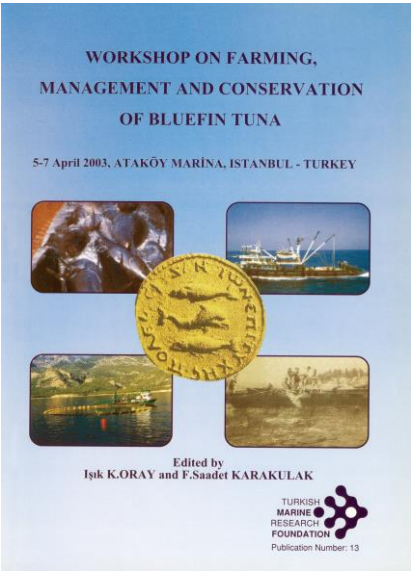


Figure 83- Proceedings of the Workshop on Farming, Management and Conservation of Bluefin Tuna



Figure 84- The participants of the Bluefin Tuna Workshop, 2003

### 6.3 Workshop on Demersal Resources in the Black Sea and Azov Sea

The workshop on Demersal Resources in the Black Sea and Azov Sea, organized by the Black Sea Environmental Program UNDP GEF Black Sea Ecosystem Conservation Project and TUDAV, took place on 15-17 April 2003 in Şile, İstanbul. The workshop focused on better management of fisheries practices, discussions of regional, national, and international precautions for the conservation of fish populations and biodiversity, demersal and other marine resources and their environments.

The book of the workshop includes benthic fishes of the Black Sea and Azov Sea, fisheries management, declining stocks and conservation of endangered species, marine protected areas, and the establishment of a Black Sea Action Plan.

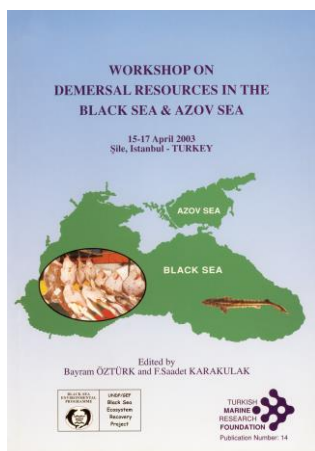


Figure 85- Discussion at the Workshop on Demersal Resources in the Black Sea and Azov Sea and Proceedings, 2003

#### 6.4 Protection of Istanbul Islands Meeting

The meeting held in 2004 in Büyükada focused on a potential ban of industrial fisheries around the Istanbul Islands up to 30 meters in depth. Attended by representatives from multiple fisheries cooperatives, necessary actions to protect the islands were discussed in detail.



Figure 86- Photographs from Protection of Istanbul Islands meeting, 2004

## 6.5 International Workshop on the Black Sea Benthos

On 18-23 April 2004 in Ataköy Marina, TUDAV, together with Black Sea Ecosystem Recovery Project (BSERP), organized the international workshop on Black Sea Benthos with specialists from six countries. The environmental conditions for the benthic life in the Black Sea, and the ecology and physicochemical parameters were discussed. The proceedings book was later published.



Figure 87- Participants of the Benthos Workshop and inventory studies on the coasts of the Black Sea, 2004



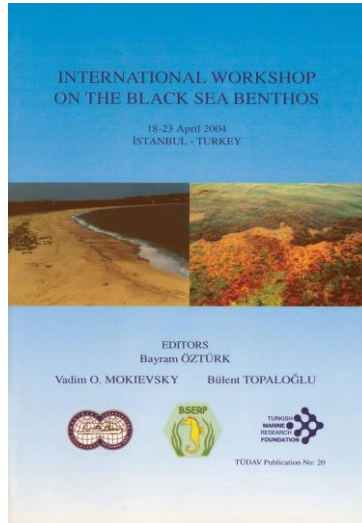


Figure 88- The proceedings published after the workshop, 2004

## 6.6 The Workshop on Particularly Sensitive Seas Areas (PSSA)

The workshop on Particularly Sensitive Seas Areas (PSSA) was organized by TUDAV, on 24 January 2005 in Ataköy Marina, Istanbul.

International Maritime Organization's PSSA-related decisions were the main focus of the meeting. Presented by the experts, the subject was explored not only for its strategic importance for Turkey but also for its significance on ecological and biological diversity. Proceedings were published as a book.



Figure 89- Particularly Sensitive Seas Areas (PSSA) Proceedings and the participants, 2005

## 6.7 The International Workshop on Mediterranean Cartilaginous Fish with Emphasis on Southern and Eastern Mediterranean

On 14-16 October 2005, the International Workshop on Mediterranean Cartilaginous Fish with Emphasis on Southern and Eastern Mediterranean took place at the Ataköy Marina, Istanbul, with the cooperation of TUDAV, UNEP-MAP, and RAC/SPA. This workshop was the first of its kind on the issues of Southeastern Mediterranean Cartilaginous fishes and fisheries management and conservation.

For all elasmobranchs, bycatch and discards are serious threats in the Mediterranean Basin, thus they must be decreased.

During the meeting, the necessity of common standards in reporting fisheries, fisheries power, and rare species, as well as studies on local names of species, and a shared database for the elasmobranchs of the Mediterranean were discussed.



Figure 90- The proceedings of the International Workshop on Mediterranean Cartilaginous Fish with Emphasis on Southern and Eastern Mediterranean and the participants, 2005



## 6.8 The IUCN Workshop

Hosted by TUDAV, an international workshop on the threatened species in the Mediterranean took place on 13-15 of October 2007 with the cooperation of IUCN. Each and every fish species in the Mediterranean was examined by the experts. Five Turkish scientists actively participated in this workshop.



Figure 91- IUCN Book, the meeting and the participants, 2007

## **6.9 The 2<sup>nd</sup> Dolphinarium Meeting**

The second meeting on the dolphinariums in Turkey was organized with the support of the Troy Dolphinarium in Belek, Antalya on 18 February 2010. The subjects included existing dolphinariums, current situation, the necessity of standards, and welfare of captive animals as well as dolphin therapy and dolphin rehabilitation. This meeting aimed to raise awareness about marine mammal conservation issues and prevent the hunting of wild dolphins.



Figure 92- The participants of the 2<sup>nd</sup> Dolphinarium Meeting, 2010

## **6.10 The Workshop on Jellyfish and Other Gelatinous Species in Turkish Marine Waters**

The workshop, organized by TUDAV, took place at the Bodrum Underwater Archaeology Museum on 20-21 May 2011. The proceedings book for the workshop was also published and distributed to the participants.

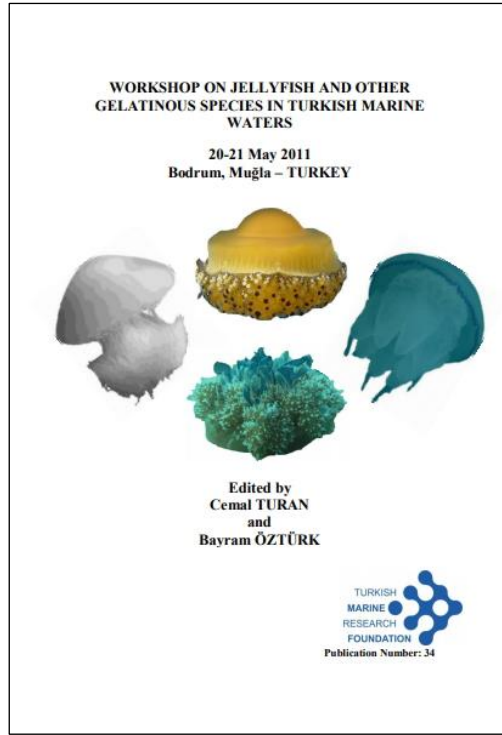


Figure 93- Proceedings book of Workshop on Jellyfish and Other Gelatinous Species in Turkish Marine Waters, 2011

General discussions and evaluations included the agreement on the necessity of Turkish names for all jellyfish species in Turkish waters. A joint information exchange platform, technical rules, and protocols for subsequent publications, as well as the development of such a protocol for the National Jellyfish Watch program was agreed ([www.denizanasi.org](http://www.denizanasi.org)). The site was later redesigned and renamed [www.yayakarsa.org](http://www.yayakarsa.org). Further studies of jellyfish in terms of the effect of climate change, pollution, and changes in the food chain, and their effects on the ecosystem, fisheries, tourism, public health, and marine activities are being proposed.



Figure 94- Participants of the jellyfish workshop, 2011

#### **6.11 The First National Workshop on Marine Biotechnology and Genomics**

TUDAV supported the First Workshop on Marine Biotechnology and Genomics in Turkey in 2012. Marine biotechnology, and consequently aquaculture, biochemistry, genetics, genomics, health, environment bioenergy, and similar areas have been rapidly developing. Genomic and proteomic studies provide very important information on the sustainability of marine ecosystems and/or research, discovery and utilization of marine biodiversity. Despite a wide range of applications, this subject has only recently gained importance in Turkey.

Surrounded by three seas and having rich biodiversity, our potential remains partially hidden as research is lacking in terms of biotechnology and genomics. The first national workshop on marine biotechnology and genomics covered a range of studies and results, such as marine aquaculture, bioinformatics, pharmacology and biomedics, marine bioproducts, marine bioenergy, marine microbiology, algal biotechnology, biomaterials, and nanobiotechnology, as well as functionality and sustainability of marine ecosystems. It was agreed that the blue growth and blue economy will be the most essential issue in the upcoming years.

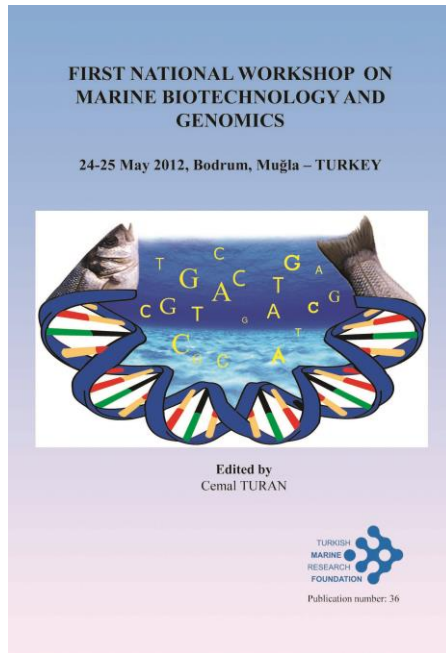


Figure 95- Proceedings book of the First National Workshop on Marine Biotechnology and Genomics



Figure 96- Participants of the First National Workshop on Marine Biotechnology and Genomics, 2012



### 6.12 Climate Change and Conservation of Cultural Heritage in Turkey

The first workshop on climate change and its effects on cultural heritage was held on 6 October 2012 in Urla, Izmir, with the cooperation of TUDAV and TINA (Turkish Foundation for Underwater Archaeology).

Aiming to unite national scientists on a shared platform for a joint project, the meeting discussed the effects of climate change and rising sea levels on our cultural heritage and heritage sites on the coastal shelf, and the necessary precautions.



Figure 97- Participants of the workshop, 2012

### 6.13 The First National Workshop on *Posidonia oceanica* on the Coasts of Turkey

The “First National Workshop on *Posidonia oceanica* on the coasts of Turkey”, organized by the Turkish Ministry of Forestry and Water Affairs, TUDAV and RAC/SPA, was held in Gökçeada, on September 19-20, 2013. Eighteen scientists attended from five different universities. The proceedings were published as a book and included presentations on biology, ecology, and distribution of *P. oceanica*, associated communities, and industrial research on *P. oceanica*. Long term monitoring studies along the Turkish coast were found necessary for mapping and protection of *P. oceanica* meadows. Moreover, current threats on the meadows, impacts of fisheries activities in the Aegean and Mediterranean Seas, and raising awareness for the protection of the meadows were discussed.



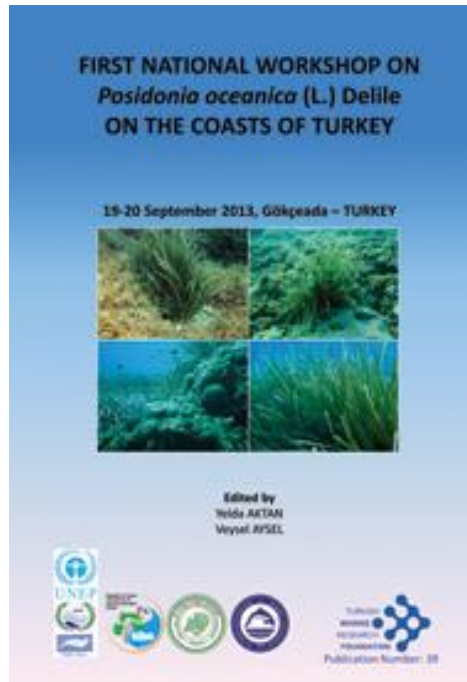


Figure 98- Proceedings of the *Posidonia* workshop, 2013



Figure 99- Some of the participants, 2013

#### 6.14 Workshop on Harmful Marine Organisms in Turkish Seas

This workshop was held on 5 May 2014, in Bodrum, organized by the Turkey Underwater Sports Federation (TSSF), the Underwater Medicine and Hyperbaric Medical Society (SHTD), and TUDAV.

Academicians from maritime and aquaculture faculties of Turkish universities, representatives from the General Directorate of Fisheries and Aquaculture, and the tourism sector, as well as underwater enthusiasts, participated in the workshop. Distribution of harmful alien marine organisms as well as damages caused by them, precautions and preparations in terms of underwater medicine and public health were discussed.



Figure 100- Workshop invitation, 2014

### **6.15 The Workshop on the Lionfish in the Eastern Mediterranean Sea: New Problems, New Solutions (Distribution, Eradication, and Utilization)**

The workshop, organized by TUDAV on 9-10 February 2017 took place at Grand Haber Hotel, Kemer, Antalya. The workshop focused on the distribution of lionfish and potential impacts on the ecosystem. The proceedings were published in the Journal of the Black Sea/ Mediterranean Environment as a special issue.



Figure 101- The Lionfish Workshop participants, 2017

### **6.16 Deep Sea Ecosystem Workshop**

Depths below 200 m are called 'deep sea'. The last 50 years saw great developments in underwater technology that enabled many nations to explore these previously unreachable zones with novel technology and lead to the discovery of new species. These nations, especially the USA, UK, Canada, and Japan are interested in deep sea mining.

In 2017, TUDAV gathered national experts working on the deep sea to create synergy, and explore and protect these unique environments such as the Finike (Anaximander) Seamounts as well as to inform the general public and governmental bodies. Deep sea species are slow growing, so it is especially important to know more about these sensitive species and habitats.

The proceedings book of the First National Deep Sea Workshop, prepared by 29 writers from 17 institutions, brought information from various disciplines together in an effort to contribute to Turkey's deep sea research. Gökçeada was chosen on purpose as the surrounding marine water can be up to 1000 m deep.



Figure 102- Proceedings and the participants of the Deep Sea Workshop, 2017

#### 6.17 The National Workshop for the Action Plan of the Conservation of Cartilaginous Fishes

On 10 March 2017, TUDAV organized a day-long workshop to form the National Cartilaginous Fish Conservation Action Plan with the participation of national experts and worked on a list of cartilaginous species in need of protection.

The conservation action plan prepared at the workshop resulted in an addendum in the Statements of the Ministry of Food, Agriculture and Livestock of the Turkish Republic regulating the Commercial (No 4/1) and Amateur (No. 4/2) Fisheries (No: 2016/35, 36). 12 species were added to Article 16, Section 1, which are *Squatina oculata*, *Squatina squatina*, *Squatina aculeata*, *Rhinobatos rhinobatos*, *Rhinobatos cemiculus*, *Oxynotus centrina*, *Mobula mobular*, *Mobula japonica*, *Alopias vulpinus*, *Isurus oxyrinchus*, *Raja clavata*, and *Squalus blainville*, in order to be placed under protection.



Figure 103- The poster and participants of the workshop, 2017

#### **6.18 The Workshop on Climate Change Adaptation for the Sea and Coasts of Antalya/Mediterranean Sea**

The workshop took place on 15 December 2017 in Antalya. The workshop, funded within the framework of Capacity Building in the Field of Climate Change in Turkey Grant Scheme, was organized with the partnership of TUDAV and the Antalya Municipality. The TUDAV team gave presentations on the subject and coordinated the roundtable. Joined by participants from various sectors, the weaknesses and strengths of Antalya in adapting to climate change, as well as new solutions to facilitate the adaptation were discussed.





Figure 104- Workshop participants, 2017

### 6.19 The Bycatch Workshop

TUDAV has been a partner to ACCOBAMS for more than 10 years and hosted the workshop on bycatch in Taksim, Istanbul, on 9 July 2018. Thirty-six people from universities, SCOs, international organizations, and the Coast Guard participated in the workshop.

Bycatch, a serious problem in fisheries, is the accidental catch of untargeted species. Every year thousands of vulnerable species such as dolphins, sea turtles, birds, sharks, and rays, are mortally entangled in fishing nets and other fishing devices.



Figure 105- Some of the workshop participants, 2018



## 6.20 The Workshop of Governance and Protection of the High Seas beyond National Jurisdiction

High seas comprise 64% of the global oceans. The Workshop on Governance and Protection of the High Seas beyond National Jurisdiction was organized by TUDAV on 20 November 2018 at the Chamber of Shipping, Istanbul. Conservation and governance of the high seas, ship-based pollution, and marine protected areas were discussed. There were ten speakers and nearly a hundred listeners in the workshop.



Figure 106- Opening speech and workshop speakers, 2018

### 6.21 The ANEMONE Marine Litter Workshop

TUDAV's marine litter workshop was held on 24 April 2019 in Istanbul within the scope of the ANEMONE project funded by the European Union (EU).



Figure 107- Discussion during the workshop, 2019

## 6.22 The Aktaş Lake Workshop and Çıldır Panel Discussion

The Aktaş Lake is a transboundary lake between Turkey and Georgia in the Caucasus Region. The Aktaş Lake Workshop and Çıldır Panel Discussion were organized jointly by the Ardahan Governorate, Ardahan University, Serhat Development Agency, and TUDAV on 27-28 September 2019. Numerous academicians, bureaucrats, related officials, and cooperative presidents attended the workshop.

Subjects included ecological and geological evaluation of the lake, development of fisheries, biodiversity, birds, ecotourism, management plans, fisheries model, cooperatives, and the evolutionary process of the lake. Georgian officials talked about their part of the lake in terms of the current situation, protection protocols, and the importance of protected areas. At the end of the workshop, the responsibilities and duties of both countries were discussed and noted. This workshop resulted in the publication of a proceedings book. During the discussion panel, the geomorphological structure, biodiversity, water quality, sustainability, protection, and conservation was discussed. A final declaration was released as a result.



Figure 108- Speakers of the panel, Prof. Bayram Öztürk; Mayor of Ardahan, Mr. Mustafa Masatlı and the participants, 2019

### 6.23 The ANEMONE Project Cetacean Workshop

Within the scope of the Project “Assessing the vulnerability of the Black Sea marine ecosystem to human pressures – ANEMONE”, TUDAV held a Cetacean Workshop on 2 December 2019, in Istanbul. During the workshop, information and training were provided about cetaceans and stranding. What should be done in case of stranding and how the stranding network on the Turkish Black Sea coast could be improved were also the topics of discussion. Experts from coastal communities along the Black Sea participated in the workshop.



Figure 109- The workshop participants, 2019

### 6.24 The Workshop Addressing Threats of Invasive Alien Species at Key Marine Biodiversity Areas, Training & Legislative Arrangements

The workshop, headed by the General Directorate of Nature Conservation and National Parks, took place in Ankara on 26-27 November 2019. During the workshop, TUDAV president Prof. Bayram Öztürk presented his findings and suggestions on legislative arrangements on invasive alien species. Additionally, Dr. Selin Gamze Sümen gave a presentation on the impacts of marine invasive alien species on human health.





Figure 110- A presentation on health and legislation concerning invasive species, 2019

## 6.25 The First National Workshop on Marine Cave Habitats

On 13 December 2019, TUDAV successfully held the First National Workshop on Marine Cave Habitats in Turkey. With 30 experts from various fields, such as scientists, technical divers, and diving instructors, representatives from non-profit organizations, governments, and UNEP/MAP, an action plan for the conservation and sustainable use of marine cave ecosystems was drafted.

Resolutions adopted during the meeting include the creation of a comprehensive marine cave inventory in Turkey, raising public awareness, forming a new generation of technical divers for cave research, placing more importance on health and safety, and protecting marine caves from human pressures such as fishermen and recreational divers.



Figure 111- Marine Caves Workshop and participants, 2019



## 7 MEETINGS

### 7.1 National Aegean Islands 2001 Meeting

Experts presented their work on the Aegean Islands during the meeting on 10-11 August 2001 in Gökçeada, Çanakkale. Despite numerous researches conducted on the Aegean islands, it is rare for experts to come together and share the information. The Aegean Sea and the islands are facing pollution and destruction of natural habitats, so it is necessary to take precautions to protect them from pollution, practice sustainable fisheries, and conduct routine monitoring studies.

The proceeding book not only focuses on the marine and terrestrial biodiversity of the Aegean islands and the environment but also explores themes such as marine pollution, dive tourism, marine geology, and geophysics.



Figure 112- National Aegean Islands 2001 Proceedings and the participants, 2001

### 7.2 ICCAT 20<sup>th</sup> Session Meeting

Experts from TUDAV have actively participated in the 20<sup>th</sup> session of the International Commission for the Conservation of Atlantic Tunas (ICCAT), held in Antalya on 8-9 November 2007. TUDAV has an observer status in ICCAT.



Figure 113- ICCAT Meeting, Antalya, 2007

### 7.3 Turkish – Japanese Marine Forum

On 8-9 December 2010, TUDAV supported the international meeting held at ITU (Istanbul Technical University) within the scope of the 2010 Year of Japanese activities in Turkey. 42 presentations were made including one by the president of TUDAV Prof. Bayram Öztürk.



Figure 114- The poster for the Turkish – Japanese Marine Forum, 2010

#### 7.4 Syria International Biodiversity Conference

TUDAV participated in the International Conference on Biodiversity of the Aquatic Environment, Towards a Diverse and Sustainable World that took place 13-15 September 2010 in Lattakia, Syria. More than 70 presentations were made including one by TUDAV's president Prof. Bayram Öztürk as an invited speaker.



Figure 115- Syria International Biodiversity Conference, Syria, 2010

#### 7.5 Meeting for the Contracting Parties (COP) of the Mediterranean Action Plan (MAP) for the Barcelona Convention (COP 18)

The Contracting Parties (COP) of the Mediterranean Action Plan (MAP) for the Barcelona Convention, which is part of the United Nations Environment Programme (UNEP), came together for their biennial meeting on 3-6 December 2013 in Istanbul. The meeting evaluated the application of the Barcelona Convention and additional protocols, decided on a work schedule and program budgets. MAP enables the Mediterranean coastal states to work together on pollution, coastal management, and biodiversity in the Mediterranean Sea.

The Declaration of Istanbul states that “the Ministers and Heads of Delegations of the Contracting Parties to the Barcelona Convention commit to developing a comprehensive, coherent network of well-managed coastal and marine protected areas in the Mediterranean by 2020 and thus extend the Mediterranean network of marine and coastal protected areas to 10% including deep seas whether within or beyond national jurisdiction”. The Turkish Marine Research Foundation (TUDAV) is a partner of the UNEP/MAP and joined the meeting as an observer, contributing with a short video titled ‘We Need More MPAs’. The video, aimed to raise awareness on the subject and highlight the role of MPAs, showed the rich biodiversity of the Mediterranean Sea and the impending dangers, with interviews of many national and international experts. The video was shown at the side event organized by TUDAV.



Figure 116- MAP COP18 Meeting, 2013

## 7.6 The Panel on Oil Spills and Precautions

On 5 June 2017, Beykoz Mariner's Associations and TUDAV organized a panel on oil pollution in marine environments to celebrate the World Oceans Day.

The recent oil spill in İzmit Bay and Çeşme was brought up to attention and possible precautions against oil pollution were discussed.



Figure 117- Participants at the Panel on Oil Spills and Precautions, 2017



Figure 118- Examples of oil spills in Turkish seas

## 7.7 The Mediterranean Coast Guard Functions Forum

The president of TUDAV, Prof. Bayram Öztürk, gave a presentation on the protection of the Mediterranean in the 6<sup>th</sup> Mediterranean Coast Guard Functions Forum held in September 2017 in Kemer, Antalya, with the participation of coast guard units from the riparian countries in the Mediterranean.



Figure 119- Opening speech by Prof. Bayram Öztürk in the Mediterranean Coast Guard Functions Forum and the participants, 2017

## 7.8 Istanbul Chamber of Shipping Council Presentation

The president of TUDAV, Prof. Bayram Öztürk, gave a presentation on the activities of TUDAV at the Council Meeting of the Chamber of Shipping on 7 November 2019. The speech is available for viewing on TUDAV's YouTube channel.



Figure 120- Prof. Bayram Öztürk's presentation at the Chamber of Shipping Council, 2019



## 7.9 Monaco Antarctica Presentation

The president of TUDAV, Prof. Bayram Öztürk, gave a presentation on the conservation of Antarctica in Monaco, in 2019. This activity was organized jointly by the IHO (International Hydrographic Organization) and Piri Reis University.



Figure 121- Participants in Monaco, 2019

## 7.10 Meetings on the Montreux Convention

The president of TUDAV, Prof. Bayram Öztürk, has participated in numerous meetings and panels concerning the Montreux Convention.



Figure 122- Prof. Bayram Öztürk with Ambassador Şükrü Elekdağ and Ambassador İsmail Soysal during a panel on the Montreux Convention.

## 8 EDUCATIONAL ACTIVITIES

### 8.1 Local Agenda 21

The information booklet Local Agenda 21 published in 1997 by TUDAV was sent to all district and town municipalities. Climate change, rising sea levels, and possible negative impacts on our coasts were highlighted within the scope of Local Agenda 21. The booklet included main topics from the United Nations Environment and Development Action Plan, and each local municipality's legal and ethical responsibility to prepare a Local Agenda 21 action plan to help future generations.

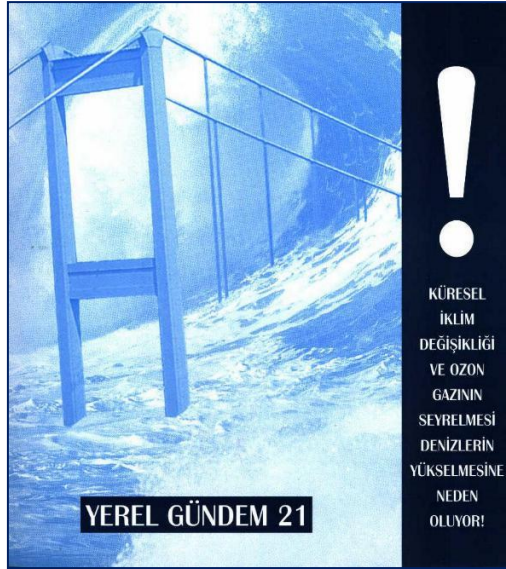


Figure 123- Local Agenda 21 booklet, 1997

### 8.2 Blue Flag for Mariners

A series of seminars were organized between 7 and 28 February 1999 at Ataköy Marina, İstanbul, within the framework of 'Environmental Awareness Training for the Mariners Project'. Boat and yacht employees were informed of the importance of marine conservation, necessary precautions against marine pollution, and eventual consequences as well as legal and environmental responsibilities of mariners.

Boat and yacht employees received a certificate for the 'Mariner Environmental Awareness Training Project' at the end of the program. Marine vessels employing these certified employees will have the right to deploy the 'Blue Flag'. An increase in Blue Flag carrying marine vessels means an increase in environmentally friendly and responsible mariners in Turkish waters.



Figure 124- Some of the 'Blue Flag for Mariners' participants, 1999

### **8.3 TUDAV-Club Patara Environmental Training Seminars**

An environmental education seminar was held on 14 November 1999 with the support of Club Patara of Kalkan. A range of topics from Blue Flag practice within the Kaş-Kalkan Coastal Zone Protection Project to biodiversity and conservation of marine mammals were presented and the participants received certificates. TUDAV experts explained issues surrounding marine conservation to local fishermen, tourism workers, schoolteachers, and local NGOs.



Figure 125- Opening of Club Patara Environmental Education Seminar, 1999

#### 8.4 Blue School LIFE project

A Blue School was organized with the Mobidik Magazine within the framework of Ölüdeniz Lagoon and Environs Protection Action Plan – LIFE Project. With the help of volunteers, the Blue School educated children from 10 to 16 years old in marine ecology. The popular program concluded with participants receiving certificates and the book 'Our Seas' in the closing ceremony.

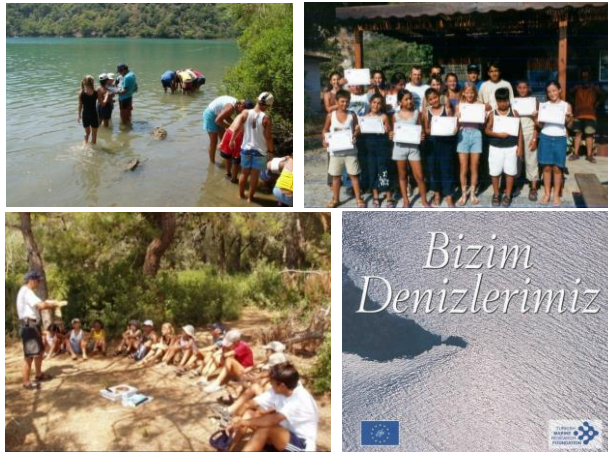


Figure 126- Educational training for the LIFE Project, participants with their certificates and the educational book 'Our Seas', 2003



'Our Seas', published within the LIFE Project, explains the marine environment and current environmental problems using an age-appropriate language. This 24-page book is for children and serves to raise awareness and love of oceans for future generations. 10.000 copies were published and distributed, free of charge, and about 5000 elementary school students in the Fethiye region received training.

## 8.5 Fisheries Training Seminars

Through the cooperation of the Sarıyer Municipality and TUDAV, the second of 'Fisheries and Aquaculture Training Seminars' took place in Çayırbaşı, Gökkuşığı Education Centre on 9 November 2012.

Important subjects ranging from sustainable fisheries to preventing extinction were discussed during the program lasting two months. Aiming to create a conscious consumer profile through public culinary choices, eight topics were thoroughly explored; seasonal changes in the taste of fish, aquarium care and fish species, trawl fisheries, characteristics of food additives, differences between fresh and non-fresh fish, potable water vs non-potable water, sustainable industrial fisheries, marine pollution and raising water quality.



Figure 127- Fisheries training seminar, 2012



## 8.6 Exhibitions of Inflatable Marine Animals

Life-sized models of marine animals such as dolphins and whales have been exhibited since 1995 at schools, festivals, and other events aimed at raising awareness, in various countries such as Australia, Iceland, UK, Germany, Chile, and Borneo. This practice came to Turkey in 2012 and 2013. Many species living in Turkish waters such as whales, dolphins, sharks, and sea turtles were displayed and reached more than 10.000 children. These exhibitions were at Gebze in 2012 and in Istanbul and Eskisehir in 2013, alongside informational posters on marine conservation, pictures, and colouring activities. Workshops on saving stranded dolphins were also organized.



Figure 128- Photographs of the shopping mall with inflatable marine animals and children receiving training on a stranded dolphin, 2013

## 8.7 Black Sea Watch Activities

A winter school for students of Istanbul was organized on 17-18 December 2016 in Şile within the framework of the project 'Black Sea Marine Environment Research with Public Participation' (Black Sea Watch). TUDAV experts talked about invasive species in the Black Sea and their impacts on local fauna, pollution, overfishing, and marine litter. The students had the opportunity to further explore topics on the beach.



Figure 129- Black Sea Watch training in Şile, 2017

Another seminar was organized within the project at the Beykoz Barbaros Hayrettin Paşa Maritime and Aquaculture Vocational High school on 14 February 2017.

After getting theoretical knowledge about the Black Sea and factors that threaten the biodiversity and ecosystem of the Black Sea from the project team, the students were able to have hands-on practice by downloading the Black Sea Watch application.



Figure 130- Black Sea Watch training in İğneada, 2017

## 8.8 Dolphin Watch Tours

Since its establishment, TUDAV has been organizing dolphin watching tours in the Istanbul Strait, mostly for children, during springtime. Characteristics of three species of dolphins living in the Istanbul Strait, as well as existing and potential threats, are explained.



Figure 131- Dolphin watch tours in the Istanbul Strait, 2016

## 9 OTHER ACTIVITIES

### 9.1 Scientific Diving Course

TUDAV has organized a scientific diving course in 1997 in order to prepare responsible divers for its own projects and to teach divers who were curious about the subject. 20 divers completed the course and received their certificate in a ceremony.



Figure 132- Scientific diving course award ceremony, 1997

### 9.2 TUDAV at the Johannesburg 2002 World Summit

An updated report about the status of biological diversity in Turkey was presented at the Johannesburg World Summit between 26 August-4 September 2002 in the Republic of South Africa (Rio+10).

Biodiversity Action Plan of Turkey and international projects were examined in terms of biodiversity and solution-based approaches. TUDAV contributed to the Sustainable Development 2002 National Report by preparing the National Report of Conservation of Biodiversity and Sustainable Development. 'Natural Heritage of Turkey', a small booklet explaining the natural wealth of Turkey, was distributed free of charge at the meeting.



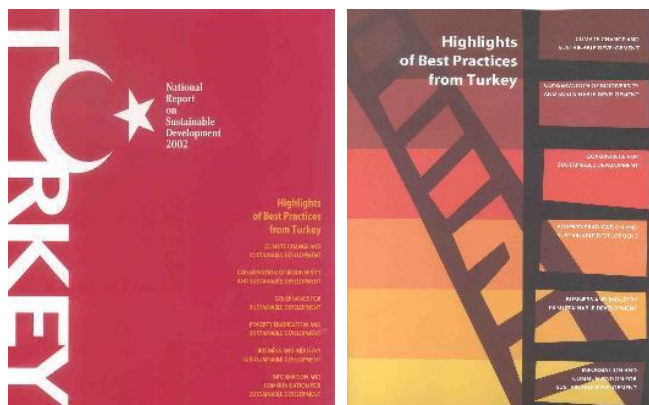



Figure 133- The Sustainable Development 2002 National Report, a collection of 6 thematic national reports formed with the participation of all stakeholders (Public sector, private sector, civil society organizations, non-governmental organizations, and governmental agencies), 2002

The biodiversity report prepared by TUDAV with the UNDP and Ministry of Environment was distributed and attracted great interest in Johannesburg.



### GÖKÇEADA MARINE PARK

**Objective:** The goal of the project is to preserve the region's rich habitat diversity by establishing a marine park, meanwhile supporting the region's intensive fishing and tourism activities in accordance with the principles of sustainable development.

**Lead Agency:** The Turkish Marine Research Foundation

**Project Partners:** Diving clubs, the Gökçeada Municipality, the Fishermen's Association, local people.


**Project Period:** February 1999 - ongoing

**Project Rationale**

- The coast of Gökçeada which is the largest island of Turkey, is very rich in terms of biodiversity, with 355 species of macro-algae, 4 species of seagull-bird, 54 species of sponge, 17 species of cephalopod, and 144 species of fish. The rich habitat diversity is the main reason for the need to establish a marine park in the region, but the region's geomorphologic structure is as important as its biodiversity.
- The greatest danger to marine biology in the region derives from non-sustainable fishing and tourism. Illegal diving and nocturnal spearfishing are rampant in the region, which at any rate is under intense pressure from fishing. Because the island did not have a Coast Guard boat, adequate control was not possible. Fishermen in the region did not know the methods for, or the necessity of biodiversity conservation. Furthermore, the harmful effects of tourism, which became more intensive in the summer, seriously threaten biodiversity.
- Given the serious legal and institutional difficulties arising from uncoordinated legal measures and the conflicts of authority between different branches of the government, there was a need to formulate a set of regulations better suited to deal with the situation.

**Critical Dates**

- February 21, 1999: Announcement of the "Marine Park" in the Official Gazette.
- June 1999: An informative meeting with the participation of local government representatives.
- June 1999: The "Underwater Photography Contest".
- July 2000: An inventory study with the participation of volunteer scientists from abroad.
- August 2000: Microbiological measurements.



**Conservation of Biodiversity and Sustainable Development**

Figure 134- 'Gökçeada Marine Underwater Park', proposed and managed by TUDAV, recognized as one of the Best Practices in Turkey and promoted at the Ubuntu Fair, South Africa



### 9.3 The Karasu Sturgeon Festival

To place the protection of sturgeons on the agenda, TUDAV, in collaboration with the Karasu Association of Culture and Solidarity, organized a sturgeon festival on 8 May 2004 and informed local people and fishermen of the protection of the endangered sturgeon species in the Black Sea. Later, young sturgeons were released in the Karasu River. After the festival, a coastal cleanup campaign was organized.



Figure 135- Informational meeting in Karasu and a coastal cleanup activity, 2004

Sturgeons are the oldest fossil fish in the Black Sea. Since 2000, TUDAV has been conducting studies on the distribution of sturgeons in the Black Sea; decontamination of rivers discharging into the Black Sea, water budget balance of rivers, the prohibition of sturgeon fisheries, and betterment of regulations as well as the education of fishermen.

Based on these studies, we have released juveniles in rivers, especially Sakarya, Kızılırmak, and Yeşilırmak Rivers for stock enhancement. Raising the awareness of fishermen and the local public was another major aim of the festival. Festival activities included an interschool composition contest on 'Sturgeon and Karasu town' as well as the showing of a movie on sturgeons. The festival was popular with the local media.

TUDAV has long invested in the conservation of sturgeons, with multiple conservation-related seminars and presentations for Black Sea fishermen between 1997 and 2000. Research activities took place in multiple locations including Sakarya and Kızılırmak. Backed by UNDP, from 2000 to 2003, the project continued in three streams; research, conservation, and education.



Figure 136- TUDAV members, Dr. Sibel Sezer, Dr. Arda Tonay and Mr. Ethem Öztürk, participating in a sturgeon study, Kırıkköy, 2001



## Çok yakında, ağlara takılacak balık kalmayacak!



Bizler: Karadeniz insanına ögü nice geleneklerle birlikte yedemizin doğal güzelliklerini de gün geçtikçe yitiriyoruz. Bundan sadece 36 yıl önce, ticari değeri olan 26 tür balığa sahipken, bugün sadece 6 tür balık yaşıyor sularımızda. Peki ya bir 30 yıl sonra?

**Farkında mısınız?**  
**Önemli bir geçim kaynağımızı kaybetmek üzereyiz. Sebebi de sadece biziz.**

Eskiden, Karadeniz deyince balıkçılık geliyordu akla. Oysa, zamanla balık sayısı azaldı, pek çok tür yok oldu. Ve şimdi, milyonlarca yıldı Karadeniz'de yaşayan ve yüzlerce ailenin geçimini sağlayan Mersin Balığı da yok olma tehlikesi altında!

## Karadeniz alarm veriyor!

Yanlış avlanma ve kirlenme sonucunda, her geçen gün balık türleri azalıyor ve yüzlerce aile işsizlikle yüz yüze geliyor. Mersin Balığı yavrularının büyümesine izin verince, bizim yavrularımız da bu balığı tanıyacak. Karadeniz halkı, yüzyıllardır olduğu gibi daha yüzyıllarca balıkçılık yaparak geçimini sağlayacak. Mersin Balığı'nın nesli tükenirse, bundan denizde yaşayan canlılar etkilenecek, zincirleme bir ilişki sonucunda başka türler de yok olacak ve geçim sıkıntısı artacak.

## Şimdi koruyalım, geleceğimizi kazanalım!

Tarım ve Köy İşleri Bakanlığı, Su Ürünleri Sirküleri'ne göre, Mersin Balıkları'nın avlanması tamamiyle yasaklanmıştır. Eğer bu yasağa uyar, onları korursak; sayıları ciddi şekilde artabilir, ve yok olma tehlikesi ortadan kalkabilir.

Böylece Mersin Balığı tekrar gelir kaynağı haline gelebilir. Mersin Balıkları'nın yeterince büyümesine izin verdiğimizde, yumurtaları havayr yapımında kullanılarak yeni bir gelir kaynağı elde edebiliriz.

Ama, her şeyden önce, balıkların büyümesini sağlamalıyız. Unutmayalım ki; Mersin Balıkları'nın yok olmasından tüm deniz canlıları, balıkçılık, turizm sektörü ve Karadeniz insanı etkilenecektir. Kültürümüz için, kendimiz için, en önemlisi de çocuklarımız için bir şey yapalım.



Büyük Mersin Balığı - Deluga



Küçük Mersin Balığı

Figure 137- Poster and pamphlets for the Sturgeon Festival, 2004

#### 9.4 The 15<sup>th</sup> Year Celebration

You are cordially invited to the 15th Anniversary Ball of the  
TURKISH MARINE RESEARCH FOUNDATION  
at the Istanbul Convention & Exhibition Centre ( ICEC )  
on 17 November 2012  
by Prof. Dr. Bayram ÖZTÜRK, director of the foundation.

Venue : Istanbul Convention & Exhibition Centre ( ICEC )  
Marmara Hall - Main Building, second floor  
Date : 17 November 2012  
19:30 - 22:30

The invitation is for two people. Informal wear.  
RSVP: Songül YAVUZ 0539 249 19 83 (by November 7th)  
tudavtudav@gmail.com

TUDAV, having been established in 1997 by a group of scientists, mariners, and nature lovers invested in marine research, has held its 15<sup>th</sup> year anniversary event on 17 November 2012, at Istanbul Lütü Kirdar International Convention and Exhibition Centre.

Opening with a short movie of TUDAV, TUDAV's president Prof. Bayram Öztürk gave a speech about

TUDAV's achievements in the past 15 years.

The speech was followed by an award ceremony for 10 people who dedicated themselves to seas and oceans: Mr. Kürşat Tüzmen, Prof. Kasım Cemal Güven, Mr. Orhan Başar, Mr. Asaf Ertan, Mr. Şükrü Genç, Mr. Atilla Silahtaroglu, Mr. Mehmet Kemerli, Mr. Oktay Sönmez as well as late Mr. Gündüz Aybay, and Prof. Jon Van Dyke.



Figure 138- Awarded contributors to the conservation of marine biodiversity, 2012





Figure 139- One of TUDAV's general assembly members, Prof. Soysal, 2012

### 9.5 Diving in Respect to the Martyrs of Çanakkale

Within the scope of the 100th anniversary of Çanakkale Naval Victory, TUDAV members dove in respect to the martyrs on May 16, 2015, in the Aydıncık (Kefaloz) region of Gökçeada, which was the headquarters and logistics base of foreign armies during World War I.



Figure 140- Dive preparations and a wreck at Çanakkale, 2015

### 9.6 The 20<sup>th</sup> Year Celebration

TUDAV's 20<sup>th</sup> year anniversary was held at Moda Marine Club, Istanbul with founding members, general assembly members, and invitees. After an evening cocktail and dinner, 'Science and Press Awards' were presented. The Science Awards were presented to the following researchers: Mr. Ali Kurumahmut, Prof. Emin Özsoy, Prof. Gökhan Halıcı, Prof. Maide Çimşit, Prof. Murat Sezgin, Ass. Prof. Mustafa Yücel. The press award was presented to the following journalists: Ms. Handan Erdoğan, Mr. Gökhan Karakaş, and Mr. Serkan Tahmaz.



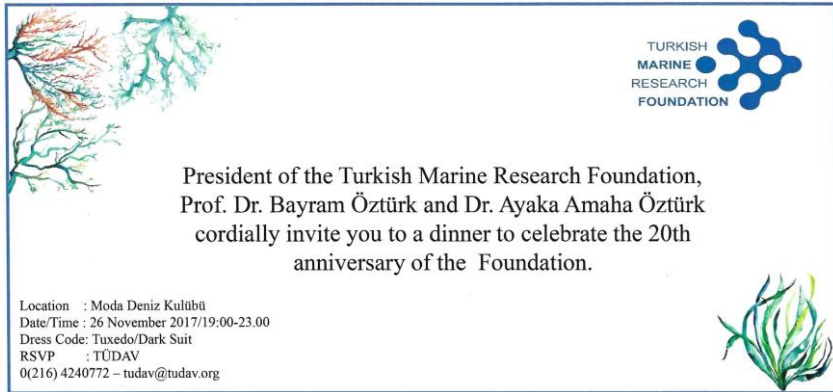


Figure 141- Invitation and Award-winners at TUDAV's 20<sup>th</sup> Year Anniversary

## 9.7 Marine Litter Exhibition

Black Sea Climate Change BS-HOT 2008 Conference (2<sup>nd</sup> Biannual and Black Sea Scene EC Project Joint Conference. Climate Change in the Black Sea, Hypothesis, Observations, Trends Scenarios and Mitigation Strategy for the Ecosystem) was organized in Bulgaria-Sofia, 6-9 October 2008. TUDAV contributed to the conference with a photo exhibition named 'New Species' aiming to raise public awareness about marine litter at the bottom of the sea and on the coasts of the Western Black Sea.

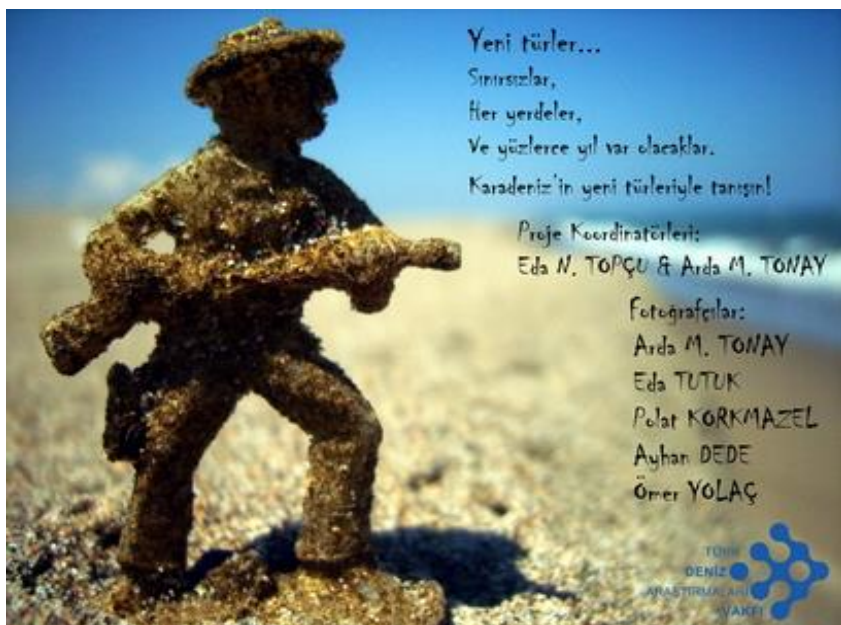


Figure 142- TUDAV New Species Exhibition in Bulgaria, 2008

## 9.8 Coastal Cleanup Campaigns

### 9.8.1 Let's Clean Up Europe

TUDAV organized the Kilyos beach cleanup event on 9 May 2015, Kilyos, Istanbul, within the framework of the "Let's Clean Up Europe" campaign. A total of 122 kg of garbage was collected.



# Kilyos Sahili'ni Temizliyoruz!

Bir çok Avrupa ülkesinde eş zamanlı olarak düzenlenen "Let's Clean Up Europe!" (Hadi Avrupa'yı Temizleyelim!) etkinliğini Türk Deniz Araştırmaları Vakfı olarak Sarıyer Belediyesi ve Let's Do It Türkiye Derneği işbirliği ile Kilyos Sahili'nde gerçekleştireceğiz. İçinde yaşadığımız dünyayı daha temiz bir yer haline getirmek için **SEN DE BİZE KATIL!**

Daha fazla bilgi ve katılım için bize ulaşın!  
[www.tudav.org](http://www.tudav.org)

Tekrar Kullan Geri Dönüşümlü Kullan Çöp Üretimini Azalt



Tarih: 9 Mayıs 2015, Cumartesi  
Yer: Kilyos Kumsalı, Sarıyer, İSTANBUL  
Saat: 11.00 - 16.00

Katılım ve bilgi için:  
0216 424 0772 - [tudav@tudav.org](mailto:tudav@tudav.org)  
[www.tudav.org](http://www.tudav.org)





Figure 143- MARLISCO, Kilyos Beach Cleanup, 2015

### 9.8.2 Let's Clean Up the Med

Beach cleanup activities were held simultaneously in Mediterranean countries on 22, 23, and 24 May 2015 within the framework of the "Let's Clean Up the Med" campaign. TUDAV organized the event in Turkey on 24 May 2015, at Riva, İstanbul. A total of 130.5 kg of garbage was collected.



Figure 144- MARLISCO, Riva Beach Cleanup, 2015

### 9.8.3 War on Plastics – Volvo Car World Environment Day Project

A global coastal cleanup event was organized on 5 June 2018, World Environment Day, to draw attention to plastic pollution in the world's oceans and clean numerous coasts. Volvo Car Turkey, in partnership with TUDAV, cleaned the Riva Beach with a team of 123 people, including more than 100 students. A total of 167.5 kg of garbage was collected.



Figure 145- Volvo Car clean-up in Riva, 2018

### 9.8.4 Other Campaigns

Marine litter has devastating consequences in Turkey and around the World, threatening marine organisms and human health.

TUDAV has organized beach clean-up campaigns on special days like World Environment Day, World Ocean Day, and World Clean-up Day with various organizations. After the collection, the litter was handed down to municipal authorities for recycling. With a long-standing interest in the appropriate disposal of plastic waste, TUDAV continues to organize events for raising public awareness.





Figure 146- Beach clean-up

### 9.9 A Photo Exhibition 'Let's Discover the Turkish Seas' – UN /New York

TUDAV was proud to organize a photo exhibition entitled 'Let's Discover the Turkish Seas' at the UN Headquarters, New York, on 19-23 August 2019, under the auspices of the Permanent Mission of Turkey to the UN, Ministry of Foreign Affairs. The exhibition, consisting of 32 photos taken by famous underwater photographers and talented volunteers, depicts the rich biodiversity and unique characteristics of Turkish coastlines and seas. The opening speech was made by Ambassador and Permanent Representative to UN Mr. Feridun Sinirlioğlu and by TUDAV's president, Prof. Bayram Öztürk.

The ambassador talked about how important it was to have healthy seas and oceans for the global economy and social and environmental welfare. Deleterious effects of climate change and pollution on marine ecosystems, as well as increase in temperature, rise in sea levels, dying coral reefs, and air pollution were mentioned along with the necessity of taking immediate action and Turkey's proactive stance on the subject.

TUDAV's president spoke about the international and national benefits of the exhibition such as the positive image and energy it will bring to multinational debates. Also mentioned was the importance of international cooperation in relation to Turkey's unique geographic location and its role in conserving biodiversity in the Black Sea and the Mediterranean. While depicting different aspects of the Turkish seas, the exhibition coincided with the "Intergovernmental Conference on an international legally binding instrument

under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction”, known as BBNJ. Photographs at the exhibition included the sperm whale rescued in 2002 in Fethiye, marine life affected by climate change, invasive alien species, endangered sharks, seagrasses, and groupers. Other prominent subjects were fish farms crucial to blue growth, aquaculture, and fisherwomen. Migratory species such as bluefin tuna, bonito, and sea turtles were included as well. Also sharing the stories of ghost fishing, escalating plastic pollution, and scientific efforts to protect our Eastern Mediterranean coasts, the exhibition was announced at the official UN Journal and held everyone’s interest until the last day.

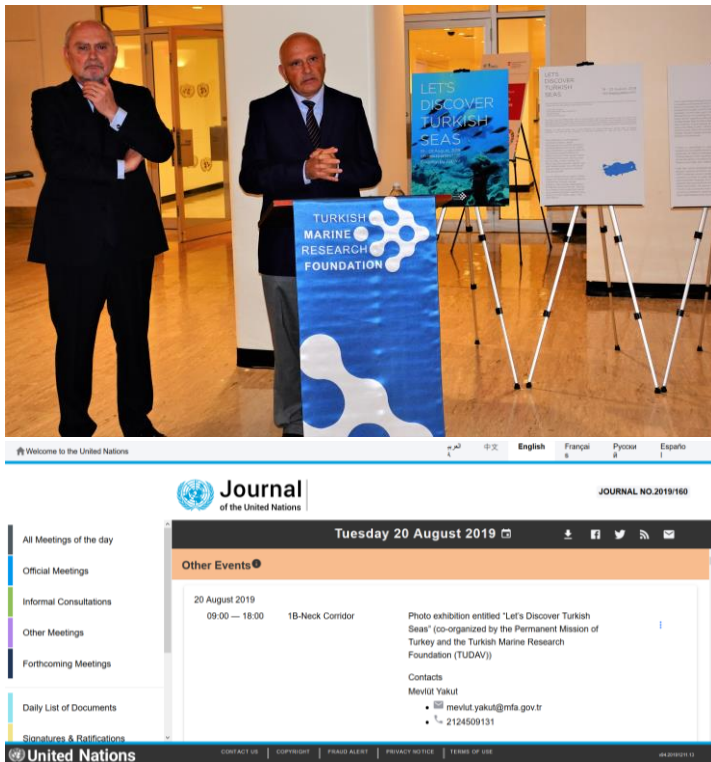


Figure 147- Permanent UN Representative Ambassador Mr. Feridun Sinirlioğlu and Prof. Bayram Öztürk at the opening speech of TUDAV photo exhibition at the UN Headquarters and announcement of the exhibition in the UN Journal, 2019



Figure 148- Exhibition poster, 2019



Figure 149- Prof. Bayram Öztürk explaining the photos, 2019

### 9.10 Prof. Keith Brander and Climate Change

Nobel Prize winner Keith Brander, a precious guest of TUDAV, gave a presentation on 'Climate change and its effects on marine habitats' at the Moda Sea Club, Istanbul. Various climate change scenarios and possible effects on marine habitats were the focus of the presentation.



Figure 150- Dr. Keith Brander giving his speech, 2019

### 9.11 22. Year Stamp

TUDAV had a stamp printed for its 22<sup>nd</sup> year anniversary. The memorial stamp was sent to TUDAV's general assembly members.



Figure 151- TUDAV stamp

### 9.12 “The Mediterranean, How Generous You Are”

For the purpose of raising awareness on the conservation of the Mediterranean, a song titled “the Mediterranean, How Generous You Are” (Çok Cömertsin Akdeniz), was written by Prof. Bayram Öztürk and composed by Mr. Musa Göçmen. It is now available on YouTube: <https://www.youtube.com/watch?v=EKscrMkKvOA.%20>. Played for the first time in 2019 during the meeting of Marine Key Habitats in Antalya, the song will be introduced to the Mediterranean countries.

### 9.13 Turkish Divers Club award

Turkish Divers Club awarded TUDAV's president, Prof. Bayram Öztürk, for ongoing efforts in marine conservation in 2013.



Figure 152- Divers and Prof. Bayram Öztürk, 2013



#### 9.14 Guinness Record at Gökçeada Marine Underwater Park

Guinness World Record holder Cem Karabay broke the world record for longest open saltwater scuba dive in cold water on 24 April 2018, after spending 30 hours and 20 minutes underwater in Gökçeada. TUDAV was one of the supporters of the event.



Figure 153- Poster announcing the record attempt, 2018

## 10 TUDAV UNDERWATER PHOTOGRAPHY CONTESTS

### 10.1 The Aegean Islands First Underwater Photography Contest 1999

The underwater photography contest organized on 20 June 1999, on Gökçeada Island, Çanakkale, was met with great interest. Participation was high despite the somewhat disadvantageous location of the island.

Underwater photographs were taken during a single dive in Yıldız Cove by fourteen divers and their diving partners. Winners were awarded in a cocktail ceremony a month later and the photographs were made into postcards to promote the underwater park.



Figure 154- Postcards printed after the contest, 1999

### 10.2 The Second My Sea Ölüdeniz Underwater Photography Contest 2003

The Second My Sea Ölüdeniz Underwater Photography Contest was held on 30-31 October 2003 in Ölüdeniz Lykia World, hosted within the scope of TUDAV's LIFE Project with the partnership of the Deniz Magazine. 64 underwater photographers participated in the competition.

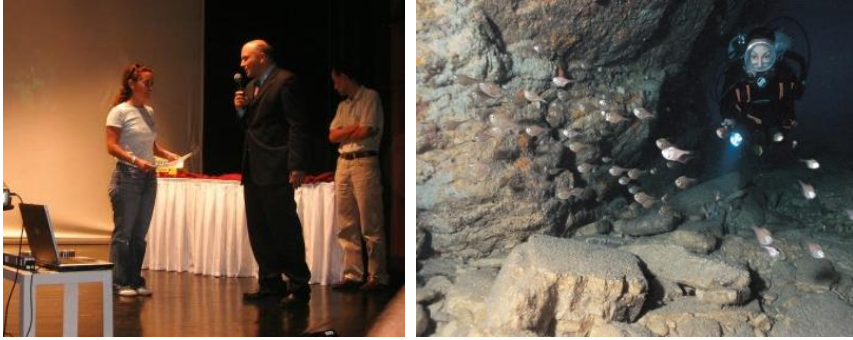


Figure 155 - The Second My Sea Ölüdeniz Underwater Photography Contest award ceremony, 2003

### 10.3 Aegean Islands 2<sup>nd</sup> Underwater Photography Contest 2005

The 2<sup>nd</sup> Underwater Photography Contest was held on 23 September 2005, for the occasion of 'Gökçeada's Today, Yesterday, Tomorrow' Panel was held in Gökçeada.

### 10.4 Samandağ Underwater Photography Contest 2007

TUDAV underwater photography contest was held on 12-13 September 2007 on the Keldağ mountainside, in the city of Hatay-Samandağ, near the Syrian border. 15 underwater photographers from Ankara, İstanbul, Bodrum, İskenderun, and Adana participated in the contest.



Figure 156- Samandağ Underwater Photography Contest winners

#### 10.5 Gökçeada 3<sup>rd</sup> Marine Park Snorkelling Photography Contest 2011



Figure 157- Marine Biodiversity 1<sup>st</sup> Place Mehmet Öztabak

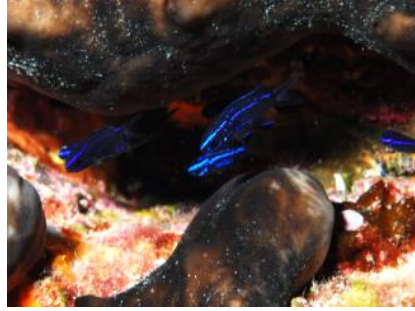


Figure 158- Fishes 1<sup>st</sup> Place Afşin Erkal



Figure 159- Invertebrates 1<sup>st</sup> Place Seracettin Gökçen



Figure 160- Algae 1<sup>st</sup> Place Murat Aksu

#### 10.6 Gökçeada 4<sup>th</sup> Marine Park Snorkelling Photography Contest 2016



Figure 161- 1<sup>st</sup> Place Tuncel Yılmaz



Figure 162- Macro 1<sup>st</sup> Place Tuncel Yılmaz





Figure 163- The photograph with all participants and the poster, 2016



## 11 CAMPAIGNS

### 11.1 Let Istanbul Strait Live, Let People Swim

TUDAV has organized a campaign 'Let Istanbul Strait Live, Let People Swim' to draw attention to the ecological degradation of the İstanbul Strait and ensure sustainable use of marine resources. The campaign focused on environmental destruction by heavy marine traffic and pollution from household wastewater in the strait, highlighting the fact that it's not safe to swim in the strait. TUDAV members and volunteers held meetings and press conferences in Paşabahçe, İncirköy, and Körfez where pollution-related stench is significant.



Figure 164- 'Let Istanbul Strait Live, Let People Swim' poster and the campaign participants in Paşabahçe, 2000

## 11.2 Bluefish for Istanbul Campaign

TUDAV's bluefish campaign began with a news article in December 2009 (Figure 158) aimed at raising awareness. TUDAV's efforts were further supported by the involvement of other NGOs, and these efforts still continue.



Figure 165- Milliyet news article, 2009

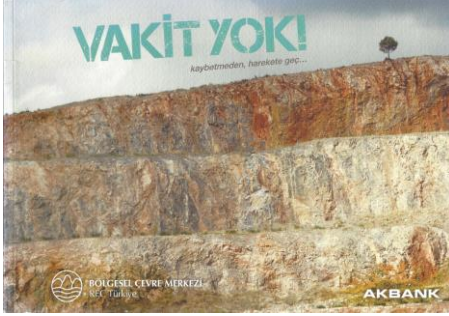
## 11.3 Gun-Free Fisheries Campaign

According to denunciations from Turkey's various regions, some fishermen target and kill dolphins from the coasts or their boats. TUDAV began a campaign in 2015 against this. Killing threatened marine mammals is unforgivable. We have requested that the Ministry of Agriculture and Forestry ban all firearms (rifles, shotguns, air guns, pistols, etc.) on fishing vessels with included in Statements of the Ministry of Food, Agriculture, and Livestock of the Turkish Republic regulating the Commercial and Amateur Fisheries. (<https://www.change.org/silahsızbalıkcılık>).



Figure 166 - The Gun-Free Fisheries Campaign, 2015

#### 11.4 No Time Left for Climate



The campaign 'No Time Left' begun in 2012 with the Regional Environmental Centre (REC) and Akbank. TUDAV was the scientific partner on the issues concerning the marine environment. The focus of the book was on the effects of climate change on marine and land-based species, as well as the

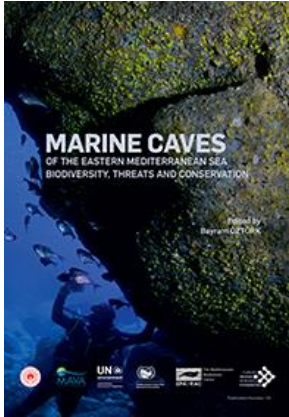
necessary precautions that must be considered.

## 12 PUBLICATIONS

### 12.1 Books

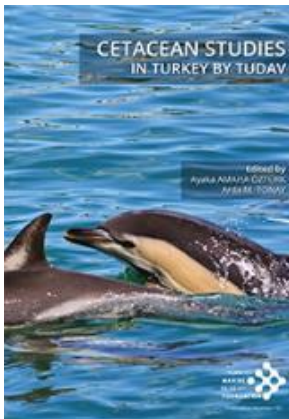
<http://tudav.org/en/our-fields/publications/books/>

#### **Marine Caves of the Eastern Mediterranean Sea. Biodiversity, Threats and Conservation**



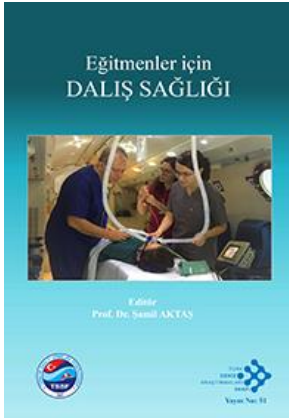
'Marine Caves of the Eastern Mediterranean Sea. Biodiversity, Threats and Conservation', consists of 18 articles that focus on subjects ranging from geomorphological studies, biodiversity, and conservation of dark habitats to cave diving and legal approaches. Prepared with the contributions of 43 scientists from diverse backgrounds. Published in 2019 by TUDAV. In English, 258 pages.

#### **Cetacean Studies in Turkey by TUDAV**



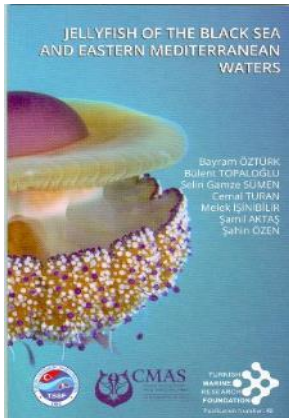
'Cetacean Studies in Turkey by TUDAV' includes a list of studies on whales and dolphins conducted by TUDAV since 1993 as well as the ACCOBAMS process. Published in 2019 by TUDAV. In English, 50 pages.

## Diving Health for Instructors



'Diving Health for Instructors' is intended to be a useful scuba diving aid for the instructors. This book includes topics related to diving disorders, diagnostic approaches, and onsite medical assistance. Prepared by expert academic medical doctors from various health-care facilities, the book consists of 18-parts. Published in 2019 by TUDAV with the help of the Turkish Underwater Sports Federation (TSSF). In Turkish, 264 pages.

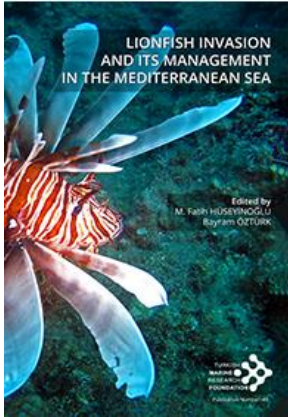
## Jellyfish of the Black Sea and Eastern Mediterranean Waters



This book contains jellyfish species in the Black Sea and Eastern Mediterranean waters, their characteristics and first aid suggestions upon contact. Published in 2018, by TUDAV with the contributions of the World Underwater Federation (CMAS) and the Turkish Underwater Sports Federation (TSSF). In English, 74 pages.



## **Lionfish Invasion and Its Management in the Mediterranean Sea**

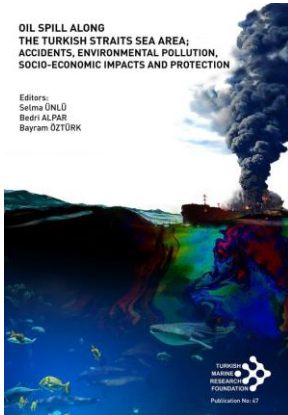


‘The Lionfish Invasion and Its Management in the Mediterranean Sea’ consists of 10 papers by 24 researchers from 17 institutions.

Subjects included are lionfish and its introduction; invasion; ecosystem, scuba diving, human health impacts; the aquarium trade; its consumption and management in the Mediterranean Sea. Published in 2018 by TUDAV. In English, 121 pages.

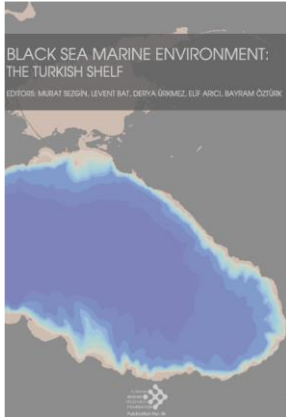
## **Oil Spill along the Turkish Straits Sea Area; Accidents, Environmental Pollution, Socio-Economic Impacts and Protection**

This book, named “Oil Spill along the Turkish Straits Sea Area; Accidents, Environmental Pollution, Socio-Economic Impacts and Protection”, consists of 7



chapters and 42 papers contributed by 59 researchers from 20 institutions. It covers a wide range of subjects regarding historical accidents along the Marmara Sea and Turkish Straits, the restrictions on oceanographic and hydro-dynamical conditions, oil pollution, new technological advances in assessing oil spill impacts and clean-up recoveries, effects on biological communities, socio-economic aspects, and international agreements. Published online in 2018 by TUDAV. In English, 464 pages.

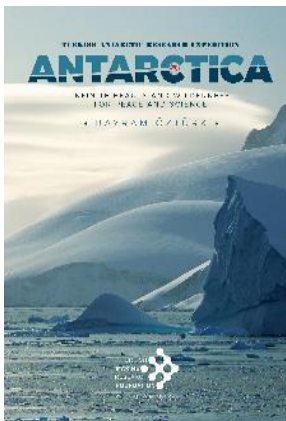
## Black Sea Marine Environment: The Turkish Shelf



‘Black Sea Marine Environment: The Turkish Shelf’ consists of 4 chapters, 28 papers by 59 researchers from 20 institutions, covering a wide range of topics regarding the Black Sea. Published online in 2017 by TUDAV. In English, 582 pages.

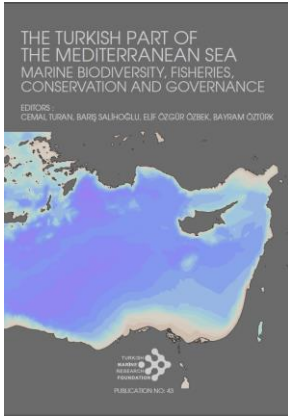
## Antarctica

Antarctica, Infinite beauty and wilderness for peace and science.



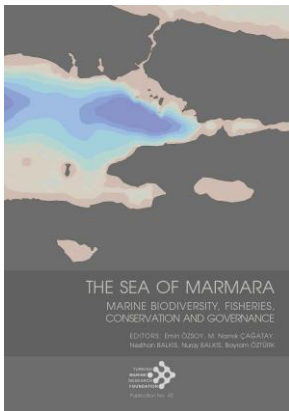
Turkish Marine Research has played a crucial role in the development of polar science in Turkey, providing financial support and lobbying for advancement. As the common heritage of humankind, this continent deserves protection for its highly vulnerable ecosystems. The author asserts that this continent and its adjacent marine ecosystem should be designated as a marine protected area. Published in 2017 by TUDAV. In English, 196 pages.

## **The Turkish Part of the Mediterranean Sea Marine Biodiversity, Fisheries, Conservation and Governance**



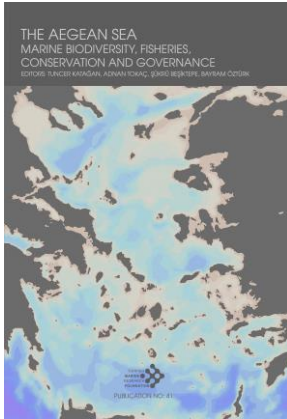
This book consists of 4 chapters, 38 papers contributed by 73 researchers from 15 institutions, covering a wide range of topics regarding the Mediterranean Sea. Published online in 2016 by TUDAV. In English, 613 pages.

## **The Sea of Marmara Marine Biodiversity, Fisheries, Conservation and Governance**



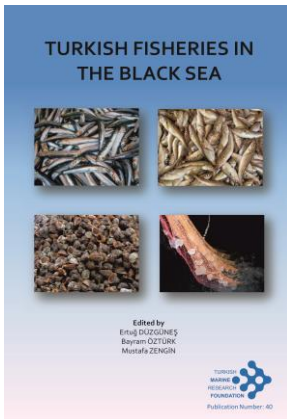
This book, consists of 5 chapters 70 papers contributed by 95 researchers from 29 institutions, covering a wide range of topics regarding the Sea of Marmara. Published online in 2016 by TUDAV. In English, 981 pages.

## The Aegean Sea Marine Biodiversity, Fisheries, Conservation and Governance



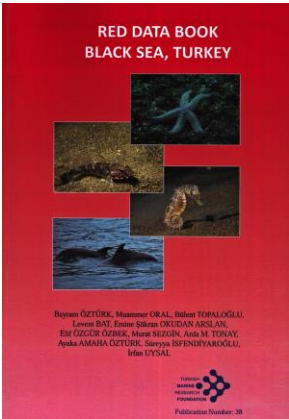
‘The Aegean Sea Marine Biodiversity, Fisheries, Conservation and Governance’ consists of 50 papers contributed by 75 researchers from 16 institutions, covering a wide range of topics regarding the Aegean Sea. Published online in 2015 by TUDAV. In English, 730 pages.

## Turkish Fisheries in the Black Sea



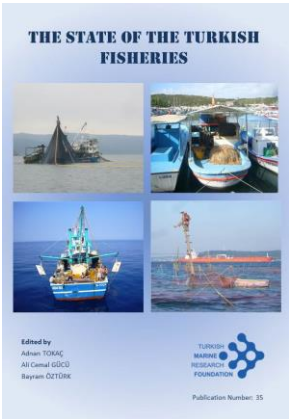
As the 40<sup>th</sup> book of TUDAV, it is the first comprehensive book on Turkish fisheries in the Black Sea. It reflects the general characteristics and state of the Black Sea fisheries. Pelagic and demersal fisheries, the biodiversity in the Black Sea, seafood processing and some current topics are covered in 26 articles in 5 chapters by 35 authors from various institutions, universities, and disciplines such as fishery and marine science faculties and research institutes of Ministry of Food, Agriculture, and Livestock. Published in 2014 by TUDAV. English, 548 pages.

**Red Data Book Black Sea, Turkey**



This book describes 131 threatened species from the Turkish part of the Black Sea and provides information about their global and regional status, distributions, habitat types, and population trends. Published in 2013 by TUDAV. In English, 323 pages.

**The State of the Turkish Fisheries**



The most comprehensive and authentic book of its time concerning the state of Turkish Fisheries. Published in 2012 by TUDAV. In English, 526 pages.

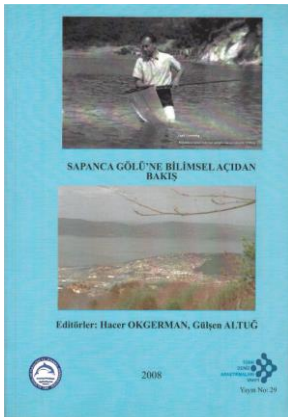


### Dispute over Eastern Mediterranean Maritime Jurisdiction Areas



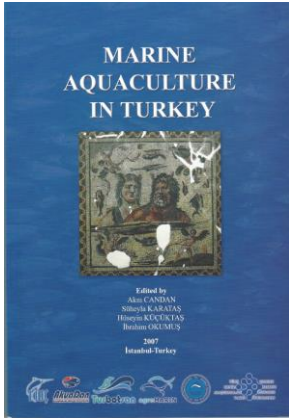
This book is concerned with the worsening dispute on maritime jurisdiction areas in the Eastern Mediterranean. Oil and natural gas reserves assumed to be in the region exacerbate the dispute. Published in 2010 by TUDAV. In English and Turkish, 143 pages.

### Scientific View of Lake Sapanca



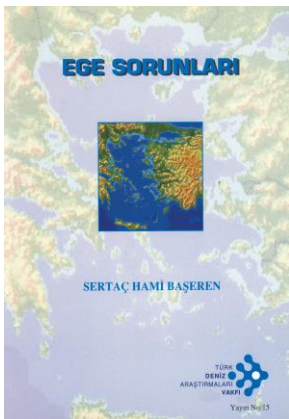
This is the first book focused on Lake Sapanca. With the contributions of an interdisciplinary team of authors from different institutes, the book aims to highlight the pollution of the Lake and be a part of the solution with a scientific approach. Published in 2008 by TUDAV. In Turkish, 161 pages.

## Marine Aquaculture in Turkey



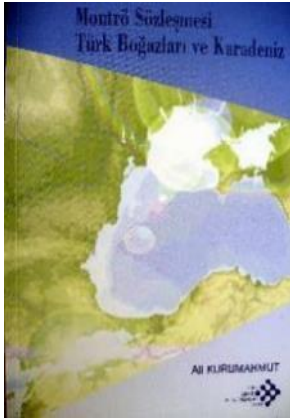
This book covers various authors on the subject of fish farming in Turkey. This book may be of great help to fish farmers, policymakers, and academic researchers. Published in 2007 by TUDAV. In English, 134 pages.

## Aegean Problems



TUDAV accomplishes its mission of increasing public awareness by publishing several books about the strategic marine problems of Turkey. This book examines the technical, historical, sociological, and political dimensions of Aegean problems. Published in 2006 by TUDAV. In Turkish, 258 pages.

## Montreux Convention, Turkish Straits and Black Sea



Turkish Straits are one of the most discussed topics recently. Montreux Convention has been successfully implemented by Turkey for 70 years and this convention protects the Turkish Straits and the Black Sea. Turkish Straits are of great interest to EU, US, and others. Turkish Straits, one of the most important marine transportation ways, is a link between all of the countries with coasts on the Black Sea, and the rest of the World.

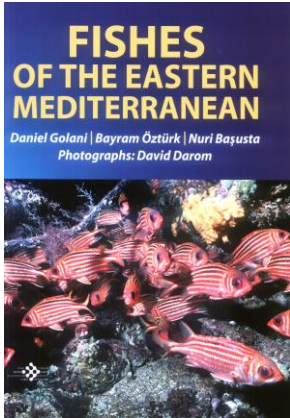
This book follows a scientific line regarding the abovementioned subjects. The book tries to answer vital questions about the Black Sea, Turkish Strait, and Montreux Convention, judicial status of Turkish Straits, responsibilities and authority of Turkey. This book prepared by Mr. Ali Kurumahmut and presented to the public. Published in 200 by TUDAV. In Turkish, 163 pages.

## Marine Pollution



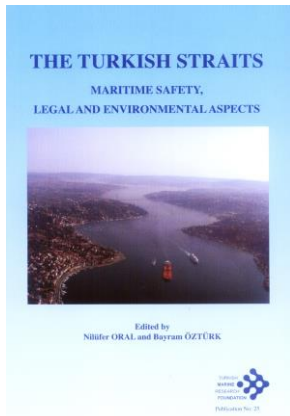
This book informs the reader on sources and dimensions of marine pollution and examines different types of marine pollution and legal measures, such as conventions, for the protection of marine environments from an international perspective. Pollution analysis methods are also discussed. Published in 2005 by TUDAV. In Turkish, 504 pages.

## Fishes of the Eastern Mediterranean



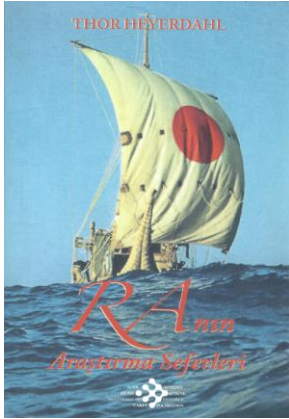
Each of the 470 species of the Eastern Mediterranean Fishes are introduced in this book. This is an excellent reference book for the Eastern Mediterranean Sea. Published in 2006 by TUDAV. In English, 260 pages.

## The Turkish Straits



This book discusses the juristic, environmental, and technical dimensions of the Turkish Straits and searches for an answer to what will be happening in the future in terms of marine transportation, marine pollution, and safety. Published in 2006 by TUDAV. In English, 160 pages.

## The RA Expeditions



This book was published in 1970, written by Thor Heyerdahl, and translated into 77 different languages. The Turkish translation was done by TUDAV. TUDAV has started translating with this book. With this Turkish translation, TUDAV aims to show the allure of marine culture. Published in 2006 by TUDAV. In Turkish, 472 pages.

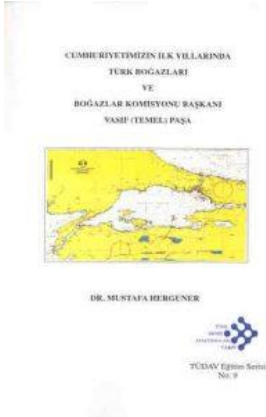
## Marine Life of Turkey



Various books have been published on marine life in Turkey in recent years, some in English and some in Turkish. The books are read by divers and marine scientists. Marine Life of Turkey, prepared by TUDAV last year, has sold out rapidly. This book is aiming to bring international prominence to the rich biodiversity in the Aegean and Mediterranean regions and universally promote national research. Published in 2004 by TUDAV. In English, 200 pages.

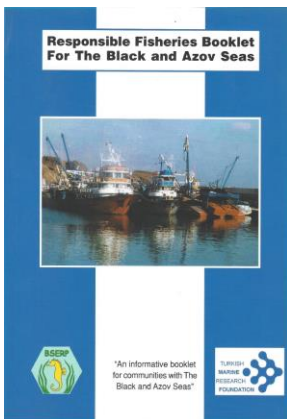


## Turkish Straits and Straits Commission President Vasıf (Temel) Pasha



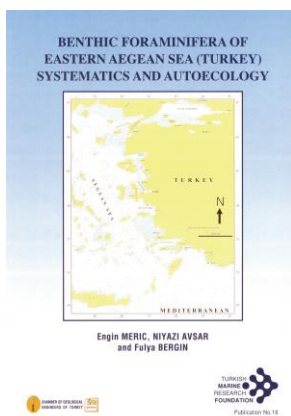
The book on Turkish Straits and Straits Commission President Vasıf (Temel) Pasha during the first years of the Republic of Turkey was prepared by Dr. Mustafa Hergüner and published by TUDAV. This book has two sections. The first part covers the Turkish Straits during the first year of our republic and the second part examines the life of Vasıf Pasha. The book summaries the history of the straits as well as describe the Turkey of Atatürk from Lausanne to Montreux. Published in 2004 by TUDAV. In Turkish, 132 pages.

## Responsible Fisheries Booklet for the Black and Azov Seas



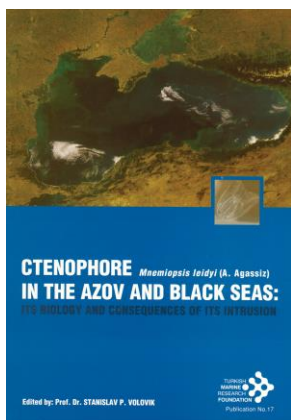
Responsible Fisheries Booklet for the Black and Azov Seas is TUDAV's 7<sup>th</sup> book. This book includes journals from 6 different countries (Bulgaria, Georgia, Romania, Russia, Turkey, and Ukraine) with coasts to the Black Sea. The book covers precautions and recommendations concerning sustainable Black Sea Fisheries. It has been translated into six different languages and has been used to educate the fishermen. Published in 2004 by TUDAV with the Black Sea Ecosystem Recovery Project (BSERP). In English, 77 pages

## Benthic Foraminifera of Eastern Aegean Sea (Turkey) Systematics and Autoecology



Prof. Engin Meriç and his colleagues prepared an excellent book on benthic foraminifers in the Aegean Sea. This book presents all the studies conducted on the East Aegean Islands together. Thus, this book is a result of a long-term study on the subject. Everyone interested in marine geology and ecology is strongly encouraged to read this book. Published in 2004 by TUDAV. In English, 497 pages.

## Ctenophore *Mnemiopsis leidyi* (A. Agassiz) In Azov and Black Seas: Its Biology and Consequences of its Intrusion

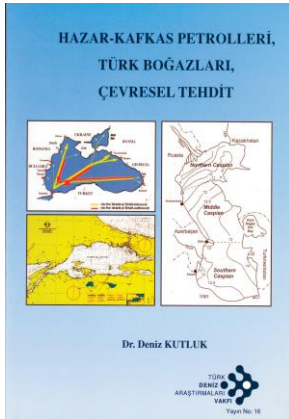


TUDAV published a book on *Mnemiopsis leidyi* which was introduced to the Black and Azov Sea by tanker ballast water in 1987. This book is focused on the ecological changes in the Black and Azov Sea, decline in fisheries in these seas, and ecological losses. This book was recommended as a sourcebook for IMO Ship Ballast Water Convention. Published in 2004 by TUDAV. In English, 306 pages.

## Caspian-Caucasus Petrol, Turkish Straits- The Environmental Threat

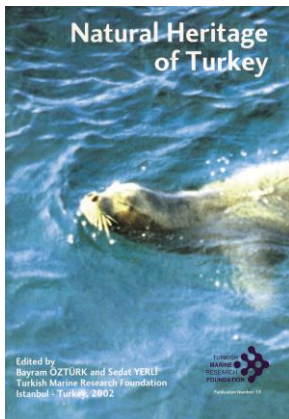
This book examines the politics of oil and environmental risks of it in a holistic approach, including pipelines and oil tankers. Moreover, politics on carrying the Caspian oil outside of the basin, pipelines and oil transportation, the Baku-Ceyhan oil pipeline, Caspian Sea and its status, transportation regime from Turkish Straits, international policies, oil pollution, and environmental risks are examined.

This book was prepared by Dr. Deniz Kutluk as a reference book for academics, policymakers, and everyone else interested in the topic. Published in 2003 by TUDAV. In Turkish, 332 pages.

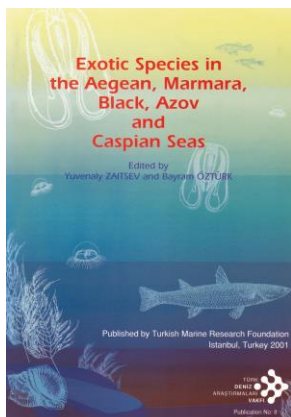


## Natural Heritage of Turkey

This is a book on Turkey's natural richness. It covers the endemic plants and animals of Turkey. Published in 2002 by TUDAV. In English, 48 pages.

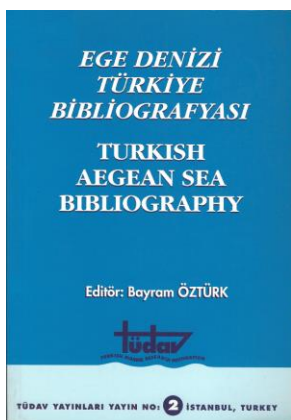


## Exotic Species in the Marmara, Black, Azov and Caspian Seas



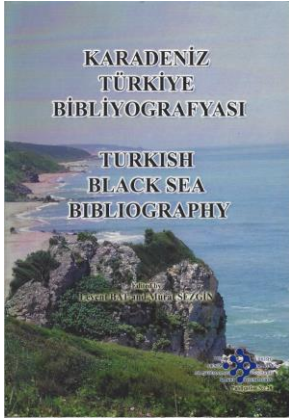
This book focuses on exotic species in the Marmara, Black, Azov, and Caspian Seas. Moreover, ecological state analysis is also carried out for each sea. Published in 2001 by TUDAV. In English, 265 pages.

## Turkish Aegean Sea Bibliography



The book covers the studies and references on the Aegean Sea. Published in 1997 by TUDAV. In English, 96 pages.

## **Turkish Black Sea Bibliography**



The Black Sea Bibliography published in 1995 by GEF/BSEP had relatively little information on the Turkish coasts of the Black Sea. For this reason, TUDAV published the Turkish Black Sea Bibliography, and later published a revised and updated edition was published afterward. The book covers a wide range of studies on Turkey's Black Sea coasts, including biological, physical, and chemical studies. Published in 1998 by TUDAV. In Turkish, 124 pages.

## **“Climate Change Adaptation for the Sea and Coasts of Antalya” EU Project, “Climate Change and Our Seas” Festival Book and Colouring Book**



The 160-page Festival book includes essays, poems, photographs, and artwork, and information on activities performed within the scope of the project.

The coloring book aims to educate children about the threatened endemic species and dangerous invasive species in the sea and coasts of Antalya. Published in 2019 by TUDAV.



### Turkish Marine Research Foundation Publications List

TUDAV has published numerous books in marine sciences with a variety of subjects such as biological oceanography, chemical oceanography, and physical and geological oceanography. These books are available to download on TUDAV's website. Below is the full list of publications.

<b>TUDAV SCIENCE SERIES</b>			
<b>Publications</b>	<b>Editors</b>	<b>Year</b>	<b>Pub. No.</b>
Karadeniz Türkiye Bibliyografyası 1996 Turkish Black Sea Bibliography 1996	Bayram ÖZTÜRK	1996	1
Ege Denizi Türkiye Bibliyografyası Turkish Aegean Sea Bibliography	Bayram ÖZTÜRK	1997	2
Beykoz İlçesi Çevre Sorunları Sempozyumu Bildiriler Kitabı Proceedings of Beykoz Environmental Problems Symposium	Hüseyin ÖZTÜRK	1998	3
The Aegean Sea 2000	Bayram ÖZTÜRK	2000	4
Marmara Denizi 2000 Sempozyumu Bildiriler Kitabı Proceedings of the Symposium "The Marmara Sea 2000"	Bayram ÖZTÜRK, Mikdat KADIOĞLU, Hüseyin ÖZTÜRK	2000	5
Ulusal Ege Adaları 2001 Toplantısı Bildiriler Kitabı Proceedings of National Meeting of Aegean Islands in 2001	Bayram ÖZTÜRK, Veysel AYSEL	2001	7
Responsible Fisheries Booklet for the Black and Azov Seas	Bayram ÖZTÜRK	2004	7
Exotic Species in the Aegean, Marmara, Black, Azov and Caspian Seas	Yuvenaly ZAITSEV, Bayram ÖZTÜRK	2001	8
Workshop on the Lessepsian Migration	Bayram ÖZTÜRK, Nuri BAŞUSTA	2002	9

Natural Heritage of Turkey	Bayram ÖZTÜRK, Sedat YERLİ	2002	<b>10</b>
The Proceedings of the Symposium on the Straits Used for International Navigation	Bayram ÖZTÜRK	2002	<b>11</b>
Ege Kıta Sahanelığı ve İlişkili Sorunlar Sempozyumu Bildiriler Kitabı	Aslan GÜNDÜZ, Hüseyin ÖZTÜRK	2002	<b>12</b>
Workshop on Farming, Management and Conservation of Bluefin Tuna	Işık K. ORAY, F. Saadet KARAKULAK	2003	<b>13</b>
Workshop on Demersal Resources in the Black Sea and Azov Sea	Bayram ÖZTÜRK, Saadet KARAKULAK	2003	<b>14</b>
Marine Life of Turkey	Bayram ÖZTÜRK	2003	<b>15</b>
Hazar - Kafkas Petrolleri, Türk Boğazları, Çevresel Tehdit	Deniz KUTLUK	2003	<b>16</b>
Ctenophore <i>Mnemiopsis leidyi</i> (A. Agassiz) in Azov And Black Seas: Its Biology And Consequences Of Its Intrusion	Stanislav P. VOLOVİK	2004	<b>17</b>
Benthic Foraminifera Of Eastern Aegean Sea (Turkey) Systematics and Autoecology	Engin MERİÇ, Niyazi AVŞAR, Fulya BERGİN	2004	<b>18</b>
II. National Aegean Islands Symposium	İdris BOSTAN, Sertaç Hami BAŞEREN	2004	<b>19</b>
International Workshop on the Black Sea Benthos	Bayram ÖZTÜRK, Vadim O. MOKIEVSKY ve Bülent TOPALOĞLU	2004	<b>20</b>
Deniz Kirliliğı Marine Pollution	Kasım Cemal GÜVEN, Bayram ÖZTÜRK	2005	<b>21</b>
Ölüdeniz Lagünü Sürdürülebilir Yönetim Sempozyumu Sustainable Management of Ölüdeniz Lagoon Symposium	Bayram ÖZTÜRK	2005	<b>22</b>
The Proceedings of The International Workshop on Mediterranean Cartilaginous Fish with Emphasis on	Nuri BAŞUSTA, Çetin KESKİN, Fabrizio SERENA, Bernard SERET	2005	<b>23</b>

Southern and Eastern Mediterranean			
Fishes of the Eastern Mediterranean	Daniel GOLANİ, Bayram ÖZTÜRK, Nuri BAŞUSTA	2006	<b>24</b>
The Turkish Straits; Maritime Safety, Legal And Environmental Aspects	Nilüfer ORAL, Bayram ÖZTÜRK	2006	<b>25</b>
Ege Sorunları Aegean Problems	Sertaç Hami BAŞEREN	2006	<b>25</b>
Montrö Sözleşmesi Türk Boğazları ve Karadeniz Montreux Convention Turkish Straits and Black Sea	Ali KURUMAHMUT	2006	<b>26</b>
Marine Aquaculture in Turkey	Akın CANDAN, Süheyla KARATAŞ, Hüseyin KÜÇÜKTAŞ, İbrahim OKUMUŞ	2007	<b>27</b>
Karadeniz Türkiye Bibliyografyası 2007 Turkish Black Sea Bibliography	Levent BAT, Murat SEZGİN	2007	<b>28</b>
Sapanca Gölü'ne Bilimsel Açıdan Bakış The Scientific View of Lake Sapanca	Hacer OKGERMAN, Gülşen ALTUĞ	2008	<b>29</b>
Doğu Akdeniz Deniz Yetki Alanları Uyuşmazlığı Dispute Over Eastern Mediterranean Maritime Jurisdiction Areas	Sertaç Hami BAŞEREN	2010	<b>31</b>
Marmara Denizi 2010 Sempozyumu Bildiriler Kitabı Proceedings of the Symposium "The Marmara Sea 2010"	Bayram ÖZTÜRK	2010	<b>32</b>
Workshop on Jellyfish and Other Gelatinous Species in Turkish Marine Waters	Cemal TURAN, Bayram ÖZTÜRK	2011	<b>34</b>
The State of the Turkish Fisheries	Adnan TOKAÇ, Ali Cemal GÜCÜ, Bayram ÖZTÜRK	2012	<b>35</b>
First National Workshop on Marine Biotechnology and Genomics	Cemal TURAN	2012	<b>36</b>

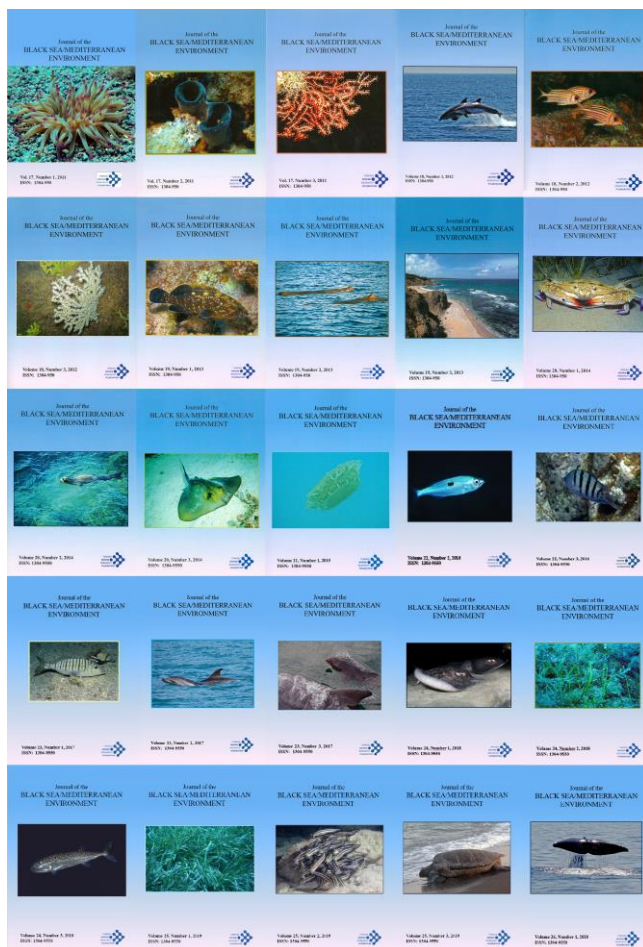
Antarktika'da Türk Araştırma Üssü Kurulması Çalıştayı Workshop on Turkish Research Base Setup in Antarctica	Bayram ÖZTÜRK, Osman ATASOY	2013	<b>37</b>
Red Data Book Black Sea, Turkey	Bayram ÖZTÜRK, Muammer ORAL, Bülent TOPALOĞLU, Levent BAT, Emine Ş. OKUDAN ARSLAN, Elif ÖZGÜR ÖZBEK, Murat SEZGİN, Arda M. TONAY, Ayaka AMAHA ÖZTÜRK, Süreyya İSFENDİYAROĞLU, İrfan UYSAL	2013	<b>38</b>
First National Workshop on <i>Posidonia oceanica</i> (L.) Delile on The Coasts of Turkey	Yelda AKTAN, Veysel AYSEL	2013	<b>39</b>
Turkish Fisheries in the Black Sea	Ertuğ DÜZGÜNEŞ, Bayram ÖZTÜRK, Mustafa ZENGİN	2014	<b>40</b>
The Aegean Sea Marine Biodiversity, Fisheries, Conservation and Governance	Tuncer KATAĞAN, Adnan TOKAÇ, Şükrü BEŞİKTEPE, Bayram ÖZTÜRK	2015	<b>41</b>
The Sea of Marmara Marine Biodiversity, Fisheries, Conservation and Governance	Emin ÖZSOY, M. Namık ÇAĞATAY, Neslihan BALKIS, Nuray BALKIS, Bayram ÖZTÜRK	2016	<b>42</b>
The Turkish Part of the Mediterranean Sea Marine Biodiversity, Fisheries, Conservation and Governance	Cemal TURAN, Barış SALİHOĞLU, Elif ÖZGÜR ÖZBEK, Bayram ÖZTÜRK	2016	<b>43</b>
Antarctica; Infinite Beauty and Wilderness for Peace and Science	Bayram ÖZTÜRK, Kadir ABBAS	2017	<b>44</b>
I. Türkiye Derin Deniz Ekosistemi Çalıştayı First Workshop on Turkey Deep-Sea Ecosystems	Onur GÖNÜLAL, Bayram ÖZTÜRK, Nuri BAŞUSTA	2017	<b>45</b>
Black Sea Marine Environment: The Turkish Shelf	Murat SEZGİN, Levent BAT, Derya ÜRKMEZ, Elif ARICI, Bayram ÖZTÜRK	2017	<b>46</b>

Oil Spill along the Turkish Straits Sea Area; Accidents, Environmental Pollution, Socio-Economic Impacts and Protection	Selma ÜNLÜ, Bedri ALPAR, Bayram ÖZTÜRK	2018	<b>47</b>
Jellyfish Of The Black Sea And Eastern Mediterranean Waters	Bayram ÖZTÜRK, Bülent TOPALOĞLU, Gamze SÜMEN, Cemal TURAN, Melek İŞİNİBİLİR, Şamil AKTAŞ, Şahin ÖZEN	2018	<b>48</b>
Lionfish Invasion And Its Management in the Mediterranean Sea	M. Fatih HÜSENYİNOĞLU, Bayram ÖZTÜRK	2018	<b>49</b>
Ulusal Yetki Alanları Dışında Kalan Açık Denizlerin Korunması ve Yönetilmesi Governance And Protection of the High Seas Beyond National Jurisdiction	Nesrin ALGAN Onur GÖNÜLAL	2019	<b>50</b>
Eğitmenler İçin Dalış Sağlığı Diving Medicine For Instructors	Şamil AKTAŞ	2019	<b>51</b>
Cetacean Studies in Turkey by TUDAV	Ayaka AMAHA ÖZTÜRK Arda M. TONAY	2019	<b>52</b>
Marine Caves of the Eastern Mediterranean Sea. Biodiversity, Threats and Conservation	Bayram ÖZTÜRK	2019	<b>53</b>



## 12.2 Journals

### Journal of the Black Sea / Mediterranean Environment



TUDAV's English triennial journal publishes new marine research articles, short communications, and reviews. Subjects include pollution, marine biology, physical and chemical oceanography, marine geology and geophysics, marine politics, biological conservation, coastal zone management, and engineering.

TUDAV's digital, open-access journal has been published since 1995 and abstracted in Chemical Abstracts, ASFA (Aquatic Sciences and Fisheries Abstracts), Biosis (Biological Abstracts, Biosis Previews), Zoological Record, CAB Abstracts, and EBSCO (<http://www.blackmedjournal.org/>).

### **Turkish Marine Life Journal 2003**

To commemorate the 80<sup>th</sup> year of the Republic of Turkey and the International Water Year, TUDAV and Hacettepe University published the Turkish Marine Life Journal with summarized statements of ‘2003 National Water Days Meeting’.

### **Turkish Marine Life Journal 2004**

This journal covers the statements of the globally-participated 1<sup>st</sup> National Malacology Congress in Izmir.

### **Turkish Marine Life Journal 2004**

This book includes all the statements presented in the ‘2004 Water Days Meeting’ in Izmir. This is a sourcebook for marine biodiversity, pollution, coastal usage, and fisheries.

### **Turkish Marine Life Journal 2005**

This journal was published for the ‘2005 Water Days Meeting’ of TUDAV.

### **Turkish Marine Life Journal 2007**

This journal was published for the ‘2007 Water Days Meeting’ of TUDAV.



## **12.3 Reports**




<http://tudav.org/en/our-fields/publications/reports/>

- 2017 Turkish Seas Report
- Climate Change and Turkish Seas Report

## 12.4 Posters

<http://tudav.org/en/our-fields/publications/posters/>

Watch Out for the Eastern Mediterranean Jellyfish



### DOĞU AKDENİZ JELİMSİ ORGANİZMALARINA DİKKAT !

YARDIMINIZA İHTİYACIMIZ VAR

**ZEHİRLİ**

**HAFİF ZEHİRLİ**

**DİKKAT !**  
Görüldüğünüz canlı  
burada gösterilmeyorsa,  
bir fotoğrafını çekip  
bize gönderin!

*Chrysaora hysoscella*  
Pusulula Denizanası  
10-30 cm

*Rhopilema nomadica*  
Göçmen Denizanası  
20-80 cm

*Carybdea marsupialis*  
Kutu Denizanası  
5-7 cm

*Macrorhynchia philippina*  
Filipin Hidroidi  
5-20 cm

*Oulidias phasphonica*  
Püsküllü Denizanası  
4-6 cm

*Pelagia noctiluca*  
Mor Sokar Denizanası  
5-10 cm

*Cassiopea andromeda*  
Ters-düz Denizanası  
20-30 cm

*Aequorea globosa*  
Yuvarlak Denizanası  
5-10 cm

*Discomedusa lobata*  
Düz Denizanası  
5-15 cm

*Aequorea vitrina*  
Kristal Denizanası  
5-15 cm

*Cotylorhiza tuberculata*  
Maviş Denizanası  
10-30 cm

*Phyllorhiza punctata*  
Beyaz Noktalı Denizanası  
30-60 cm

*Rhizostoma pulmo*  
Denizciğeri Denizanası  
20-60 cm

**BİZE BİLDİRİN !**

Aşağıdaki bilgileri bize ulaştırarak yardımçı olabilirsiniz:

- Gördüğünüz tür yukarıdakilerden en çok hangisine benziyor?
- Gözlem tarihi ve bölgesi
- Gözlenen hayvan sayısı
- Denizde canlı olarak mı yoksa karaya vurmuş olarak mı gözlediniz?

İhbarlarınızı varsa fotoğraflarıyla birlikte aşağıdaki e-posta adresinden bize ulaştırabilirsiniz.

E-posta: [tudav@tudav.org](mailto:tudav@tudav.org)  
Web: [www.tudav.org](http://www.tudav.org)  
[www.yayakarsa.org](http://www.yayakarsa.org)  
Tel: +90 216 4240772

**BELİRTİLER**

Kızamıklık, Şişlik, Yanma, Kaşıntı, Ağrı, Şişme, Uyuşma, Bulantı, Kusma, İshal, Kas kasmaları, Havale.

Yakınmaların birkaçı bir arada bulunabilir.

**TEDAVİ**

- Sakin olun! Hemen sudan çıkın.
- Deriye yapışan parçaları uzaklaştırmak için sadece deniz suyu kullanın. Buz, el ve havlu ile dokunmayın.
- Asla çıplak elle dokunmayın. Yakıcı kapsülleri deriye bol sirkle dökerek etkisizleştirin. 30 dakika veya ağrı geçinceye kadar bol sirkle emdirilmiş temiz bez yaranın üzerinde tutunuz.
- Etkisizleştirilen kapsülleri uzaklaştırmak için traş köpüğü ya da kum uygulayarak deriye yapışanları bıçak veya kredi kartı kenarı ile sıyırın. 15 dakika sonra tekrar sirkle uygulayın.
- İlk yardım uygulamalarının ardından hemen hastane acil tip polikliniğine mutlaka başvurulmalıdır.
- Eğer kötü hissetmeye başlarsanız hemen yere yatın ve 112'den yardım için Ambulans çağırın.

112

TÜRK DENİZ ARAŞTIRMALARI VAKFI (TUDAV) 2017

## Wanted: Lionfish!



## ARANIYOR: ASLAN BALIĞI ! WANTED: LION FISH !



*Pterois* genusuna ait türler Aslan balığı olarak bilinmektedir.

Bu balıklar "gezegenimizde yaşayan en agresif istilacı türlerden biri" olarak tanımlanmıştır. Yüzgeç ışınları zehirlidir.

Indo-Pasifik kökenli olup Akdeniz'e Kızıldeniz'den Süveyş Kanalı Yoluyla girmiştir. Büyük miktarlarda küçük balıkları avlayan yetenekli avcılardır ve ekosistemi tahrip ederler; bununla birlikte, bu balıkları yiyen doğal yırtıcıları çok azdır.

Diğer balıklardan daha hızlı büyür ve ürer. Çoğu kazayı onları yakalayan balıkçılar ve dalgıçlar yaşamaktadır.

*Pterois* is a genus of venomous marine fish, known as lionfish.

They have been described as "one of the most aggressively invasive species on the planet". They are known for their venomous fin rays. Native to the Indo-Pacific region, entered to the Mediterranean Sea via Suez Canal. Lionfish are skilled hunters, prey mostly in small fish in large amounts and destroy ecosystems; however, they have few identified natural predators. They grow and reproduce faster than other fish. Most accidents happen to fishermen and divers who happen to catch them.



### Zehiri

Aşırı ağrı, mide bulantısı, kusma, ateş, nefes darlığı, baş dönmesi, etkilenen bölgede kızamık, baş ağrısı, uyuşma, mide ekşimesi, diyare ve terleme gibi etkilere neden olabilir.

### Ambulans için 112'yi Arayın

İlk yardım uygulamalarının hemen ardından acil servise başvurulmalıdır.

Daha fazla bilgi ve gözlemlerinizi bildirmek için lütfen TUDAV'ı arayınız.

Turkish Marine Research Foundation • + 90 216 424 07 72 • tudav@tudav.org • www.tudav.org



Zehirli dikenler  
Venomous spines

### The venom

In humans, *Pterois* venom can cause systemic effects such as extreme pain, nausea, vomiting, fever, breathing difficulties, dizziness, redness on the affected area, headache, numbness, heartburn, diarrhea, and sweating.

### Call 112 for Ambulance

Get medical care if you are experiencing any symptoms

For more information and report sightings contact



## Seas are NOT Waste Bins!

[illegible]



## 12.5 Short films

These TUDAV-made movies hope to raise awareness in the general public and are available on our YouTube channel as a form of historical-visual archive, with the foundation's existence going back to 1997.

- TUDAV 2019 Marmara and Western Black Sea Cetacean Surveys  
<https://youtu.be/s8RHeBEpTfl>
- Gökçeada's Monk Seals  
[https://youtu.be/oNF6\\_OUfLdc](https://youtu.be/oNF6_OUfLdc)
- 'Let's Discover Turkish Seas' UN Photo Exhibition Opening  
<https://www.youtube.com/watch?v=Lw6p8Ootleg>
- Illegal, Unregulated, Unlawful Fisheries  
[https://www.youtube.com/watch?v=toCk7OsBH\\_M](https://www.youtube.com/watch?v=toCk7OsBH_M)
- Current System Modelling of Turkish Seas  
<https://www.youtube.com/watch?v=6jpyNOxyxck>
- Mediterranean, How Generous You Are  
<https://www.youtube.com/watch?v=EKscrMkKv0A>
- Science and the fight against IUU fishing  
<https://www.youtube.com/watch?v=VAuPDZIHgs4>
- Project short movie: Climate Change Adaptation of Sea and Coasts of Antalya EU Project  
<https://www.youtube.com/watch?v=4qCzWbm5iUs>
- Lionfish in the Mediterranean Sea  
<https://www.youtube.com/watch?v=3KAJcGcdVM8>
- Say no to Plastics in the Sea!  
<https://www.youtube.com/watch?v=cHXNulqeUZk>
- On the Beach  
<https://www.youtube.com/watch?v=mBhu3WjAtXQ>
- Unusual Duo  
<https://www.youtube.com/watch?v=AHzV-4dxN2M>
- Gökçeada Marine Underwater Park – Following Natural Flavours from Europe to Anatolia  
[https://www.youtube.com/watch?v=k3W3\\_xX16II](https://www.youtube.com/watch?v=k3W3_xX16II)
- Gökçeada Marine Underwater Park 2016  
<https://www.youtube.com/watch?v=zL14DiTkxTk>

- Turkish Antarctic Research Expedition 2016  
<https://www.youtube.com/watch?v=BFdApvy30ME>
- A Whale of a Road (Minke's Way)  
[https://www.youtube.com/watch?v=bhwG\\_\\_BPjVU](https://www.youtube.com/watch?v=bhwG__BPjVU)
- National Marine Litter Forum (MARLISCO)  
<https://www.youtube.com/watch?v=ZGLzdGHjUX4>
- MARLISCO Forum 1. Part  
<https://www.youtube.com/watch?v=bF3c0IgVEq0>
- MARLISCO Forum 2. Part  
<https://www.youtube.com/watch?v=x7k2Tf565dU>
- A Story of an Invasive Alien Species, *Rapana venosa*, in the Black Sea  
<https://www.youtube.com/watch?v=jHO-iUAtAdU>
- We need more MPA's  
<https://www.youtube.com/watch?v=-X5KcX1PRTA&t=6s>
- Documentary of Research Expedition in Romania  
<https://www.youtube.com/watch?v=ol4MyAxiwmc&t=173s>
- Preserving the Marine Environment of Ölüdeniz Lagoon  
<https://www.youtube.com/watch?v=FOz2zhA-jWg&t=10s>
- TUDAV 15. YEAR  
<https://www.youtube.com/watch?v=1q0RX4iORvU&t=94s>
- Inflatable Marine Animals in Turkey!  
<https://www.youtube.com/watch?v=NvVd0S4INjc>

## 13 INTERNATIONAL RELATIONS

### 13.1 International Relations

Our president held meetings with various institutions and organizations for joint efforts and cooperation.



Figure 167- Prof. Bayram Öztürk presenting TUDAV's book to EU Representative Ms. Maria Damanaki; COP 16, 2011



Figure 168- Three Black Sea scientists- Prof. Bayram Öztürk with Dr. Yuvenaliy Zaitsev and Prof. Boris Alexandrov in Dr. Zaitsev's office in Odessa

#### 13.1.1 Prof. David Bellamy

British environmental scientist Prof. David Bellamy visited TUDAV in 1997 with his team and we exchanged opinions about joint projects.



Figure 169- Prof. David Bellamy's team, 1997

#### 13.1.2 Stands

TUDAV had stands in various national and international events to disseminate its activities to the participants. Visitors were told about the foundation's goals and involvement in projects during national and international marine symposiums like COP18 and Johannesburg World Summit, TUYAP Book Fair, Boat Show, Ataköy Marina, Ölüdeniz, Universities and Science Centre. TUDAV stands have been popular with international audiences in the Republic of South Africa, Germany, Italy, and Monaco.



Figure 170- TUDAV- TUYAP stand



Figure 171- TUDAV – Barcelona Convention COP18 stand, 2012



Figure 172- Antalya, TUDAV stand, 2018



Figure 173- Johannesburg World Development Summit, Turkey Ubuntu Fair stand, 2002



### 13.1.3 Visit by Nicholas Redman

Mr. Nicholas Redman, the coordinator of 'Whalebones Project' aiming to record the bones of all the great whales (Blue, Sei, Long, Right, Minke and Sperm Whale) that is exhibited or used for decorative purposes around the world, visited the fin whale skeleton, belonging to TUDAV, at the ITU Science Centre. The 6<sup>th</sup> book of the Project, published in 2013 (TUDAV's whale included) covers whales' bones from France, Southern Europe, Middle East, and North Africa.



Figure 174- Nicholas Redman with TUDAV's Fin whale skeleton

### 13.1.4 EU Green Week

TUDAV had a stand in Brussels, 2015, for the European Union Greek week and the Commissioner of the European Union DG Mare visited TUDAV's stand.



Figure 175- TUDAV's popular stand and Mr. Karmenu Vella, 2015

### 13.1.5 Rhodes Ocean Academy

TUDAV's president discussed future joint efforts and cooperation with the president and vice-president of Rhodes Ocean Academy in 2018.



Figure 176- Meeting with Dr. Nikolaus Skourtos, Rhodes Ocean Academy, 2018

### 13.1.6 West Africa Relations



Figure 177- TUDAV is against child labour in the fisheries sector and supports ILO regulations in Africa.



Figure 178- At the Research Vessel General Lansana Conte before an expedition, Conakry, Guinea and meeting with President of Guinea, Prof. Alpha Condé, about the development of Guinean fisheries and future cooperation  
Press Release about the Toxic and Poisonous Alien Species occurring in the Mediterranean Sea

Nearly a thousand alien species have been reported in the Mediterranean Sea, much more than other European seas. A small number of marine invasive alien species impact human health negatively, being venomous and poisonous. Recently, news of the death of three Libyan fishers who consumed poisonous silver-cheeked toadfish drew the attention of the media and the public. As a group of marine scientists, engaged in the study of alien species, TUDAV needs to provide accurate information concerning these new health hazards.

The press release is available at the following link: <https://bit.ly/2xWNOSD>

### 13.1.7 Australian Guests

TUDAV hosted the Australian 'Friends of Çanakkale' guests at the Anzak Cove, Çanakkale (Dardanelles) in 2017.



Figure 179- TUDAV's Australian guests

### 13.1.8 The International Black Sea Day

TUDAV's president has participated in the International Black Sea Day, organized in Odessa, Ukraine in 2011.



Figure 180- International Black Sea Day, Odessa, Prof. Moncheva and Prof. Zaitsev



### 13.1.9 The Deep Sea Exhibition

TUDAV's president visited the Deep Sea exhibition, organized in Tokyo, Japan.



Figure 181- Prof. Bayram Öztürk in front of Shinkai 6500, Tokyo, 2020

### 13.1.10 CIESM 2019

TUDAV's Board of Directors participated in the CIESM 2019 Congress in Portugal.



Figure 182- Prof. Bayram Öztürk, Prince Albert II and some of the other participants, CIESM board meeting, 2019



### **13.2 Intern Students**

TUDAV hosted four international students until today. Two of the students were from Germany, one from France and another from the UK.

### **13.3 UN Conference Participation List**

Maritime Safety Committee, 71<sup>st</sup> Session

19 - 28 May 1999, Istanbul, Turkey

Marine Environment Protection Committee, 44<sup>th</sup> Session

6 - 15 March 2000, Istanbul, Turkey

The World Summit on Sustainable Development

26 August - 4 September 2002, Johannesburg, South Africa

55<sup>th</sup> Meeting of the International Whaling Commission, Scientific Committee

26 May - 6 June 2003, Berlin, Germany

Workshops on: The Governance of High Seas Biodiversity Conservation & Ecosystem-Based Management

16 - 20 June 2003, Cairns, Australia

Maritime Safety Committee, 82<sup>nd</sup> Session

29 November - 8 December 2006, Istanbul, Turkey

Extraordinary Meeting of National Focal Points for Specially Protected Areas, Meeting of National Correspondents of the Strategic Action Program for the Conservation of Biological Diversity in the Mediterranean Region

1 - 2 June 2010, Istanbul, Turkey

17<sup>th</sup> Ordinary Meeting of the Contracting Parties to the Barcelona Convention and its Protocols

8 - 10 February 2012, Paris, France

20<sup>th</sup> Anniversary Summit of the Heads of State or Government of the Organization of the Black Sea Economic Cooperation

26 June 2012, Istanbul, Turkey

The 2012 Forum of Marine Protected Areas in the Mediterranean  
25 - 28 November 2012, Antalya, Turkey

Working Group on the Black Sea  
24 - 26 April 2013, Rome, Italy

XXXVI Antarctic Treaty Consultative Meeting  
20 - 29 May 2013, Brussels, Belgium

18<sup>th</sup> Ordinary Meeting of the Contracting Parties to the Barcelona Convention  
and its Protocols  
3 - 6 December 2013, Istanbul, Turkey

XXXVII Antarctic Treaty Consultative Meeting  
28 April - 7 May 2014, Brasilia, Brazil

General Fisheries Commission for the Mediterranean 39  
25 - 29 May 2015, Milano, Italy

24<sup>th</sup> Regular Meeting of the International Commission for the Conservation of  
Atlantic Tunas  
10 - 17 November 2015, St. Julians, Malta

Conference on the Blue Economy of the Black Sea  
14 - 15 June 2016, Odessa, Ukraine

High-Level Conference towards Enhanced Cooperation on Black Sea Fisheries  
and Aquaculture  
24 - 25 October 2016, Bucharest, Romania

Working group on Illegal, Unreported and Unregulated fishing - Working Group  
on Vessel Monitoring Systems and Related Control Systems  
2 - 5 May 2017, Rome, Italy

Working group on Illegal, Unreported and Unregulated fishing - Working Group on Vessel Monitoring Systems and related control systems

20 - 24 April 2018, Rome, Italy

High-Level Conference towards Enhanced Cooperation on Black Sea Fisheries and Aquaculture

6 - 7 June 2018, Sofia, Bulgaria

Intergovernmental Conference on an international legally binding instrument under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction

17 September 2018, New York, ABD

DEHUKAM International Workshop 2018, The Legal Regime of Underwater Cultural Heritage and Marine Scientific Research

4 - 5 October 2018, Bodrum, Turkey

Fishforum 2018, Forum on Fisheries Science in the Mediterranean and the Black Sea

10 - 14 December 2018, Rome, Italy

Marine Key Habitats and Non-Indigenous Species Symposia

14 - 18 January 2019, Antalya, Turkey

Intergovernmental Conference on an international legally binding instrument under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction

30 August 2019, New York, ABD

42<sup>nd</sup> International Congress of Mediterranean Science Commission

7 - 11 October 2019, Cascais, Portugal

Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area, 7<sup>th</sup> Meeting of the Parties

5 - 8 November 2019, Istanbul, Turkey

## **13.4 Partnerships with International Organizations**

### **13.4.1 High Seas Alliance**



The High Seas Alliance (HSA), with its 37 non-governmental members, as well as the IUCN, has been working towards protecting approximately 50% of the planet that is the high seas, since its founding in 2011. As the region of the global ocean that is beyond national jurisdiction, the high seas include some of the most biologically important, least protected, and most critically threatened ecosystems in the world.

HSA members work together to inspire, inform and engage the public, decision-makers and experts to support and strengthen high seas governance and conservation, as well as to cooperate toward the establishment of high seas protected areas. As such, TUDAV's current priority is a new international legally binding treaty under the United Nations Convention on the Law of the Sea that will protect biological diversity in the high seas and seabed.

Currently, there is no legal mechanism with which to establish marine protected areas outside of states' territorial seas, nor a mechanism to undertake environmental impact assessments.

At the same time, increasing impacts from human activity, through overfishing, deep-seabed mining and shipping, as well as climate change, continue to negatively affect biodiversity on the high seas. HSA is working to ensure that current United Nations discussions around the new treaty result in recommendations for robust and effective conservation measures that address gaps in current ocean governance. TUDAV has been a member since 2018.

### 13.4.2 Deep Sea Conservation Coalition



The Deep Sea Conservation Coalition (DSCC) was founded in 2004 to address the issue of bottom trawling on the high seas, in the absence of an effective regime for the management of deep-sea fisheries on the high seas and in response to international concerns over the harmful impacts of deep-sea bottom trawling. Working with scientists, NGOs, intergovernmental organizations and numerous governments, the DSCC has effectively and consistently targeted the United Nations General Assembly (UNGA) and other international fora to call for action.

DSCC focuses on two main goals:

- To substantially reduce the greatest threats to life in the deep seas; and
- To safeguard the long-term health, integrity and resilience of deep-sea ecosystems.

Today more than 70 organizations worldwide are working together under the umbrella of the DSCC to protect cold-water corals and vulnerable deep-sea ecosystems. TUDAV is a partner since 2018.

### 13.4.3 ICCAT



TUDAV has gained an observer status for International Convention for the Conservation of Atlantic Tunas (ICCAT). As the only observer from Turkey, TUDAV will monitor national stocks and work for Turkey's benefits and rights, and access to sustainable fisheries practices.



#### 13.4.4 ACCOBAMS



TUDAV is a partner of ACCOBAMS – “Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Area” since 2008.

#### 13.4.5 CIESM



CIESM is a scientific organization with 23 member states including 20 riparian countries along the Mediterranean and Black Sea, as well as Germany, Portugal and Switzerland. Established long ago with the first meeting held on March 1910 and headquarters in Monaco, the organization supports all marine research and organizes a conference every three years. TUDAV became an affiliated marine lab in 2002.

#### 13.4.6 UNEP MAP RAC/SPA



Regional Activity Centre for Specially Protected Areas (RAC / SPA), was established by the Contracting Parties to the Barcelona Convention and its Protocols in order to assist Mediterranean countries in implementing the Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean. TUDAV has been allied with this institution since 2015.

#### **13.4.7 MEDPAN**



The MedPAN organisation was created at the request of some Mediterranean Marine Protected Areas managers in 2008 with the mission to coordinate the MedPAN network, the network of Marine Protected Areas managers that exists since the 90s. TUDAV has been a part of the network since 2015.

#### **13.4.8 National Antarctic Scientific Centre of Ukraine NASC**



**STATE INSTITUTION  
NATIONAL ANTARCTIC  
SCIENTIFIC CENTER**  
Ministry of Education and Science of Ukraine

TUDAV collaborates with the National Antarctic Scientific Centre of Ukraine during Antarctic expeditions. This partnership continues.

## 14 TUDAV CONTACT AND DONATIONS

JOIN US TO HELP PROTECT OUR SEAS

More information on TUDAV is available on TUDAV's website:

<http://www.tudav.org/en/>.

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For donations, our bank account is;

TUDAV – Ziraat Bank, TR03 0001 0005 3202 5893 8750 07

## 15 FOREVER REMEMBERED

Dearly departed Founders and General Assembly members of TUDAV;

Ertuğrul KAYIHAN

Halidun ERGÜNT

Emel KAYIHAN

Gündüz AYBAY

Oktay SÖNMEZ

Prof. Mümtaz SOYSAL

Prof. Kasım Cemal GÜVEN

## THANKS:

We sincerely thank all office personnel, technical personnel and project personnel that have worked with us since the establishment of TUDAV and helped us become what we are.





ISBN 978-975-8825-50-9