FLOATING ISLANDS AND RESEARCHES OF TURKEY'S FLOATING ISLANDS

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Abstract. Turkey has much natural and cultural richness. Especially the natural assets located in developing regions have an important role to play in economical life of those regions. The floating islands are one of these assets and have become an important research subjects lately. With many floating islands, Turkey is considered as a heaven of floating islands. Almost all geographical regions in Turkey has many floating islands located throughout landscape of the country. Turkey's Floating Islands is very important. This islands have not come to the attention of the researchers so far. This study aims at introducing these floating islands and add them to the World floating islands bibliography. By examining the islands we hope to bring the subject to the attention of nature conservation parishioners. We hope to contribute to the tourism literature by examining the potential of the area in terms of ecotourism. Because these floating islands were discovered recently and because their use by human population has not been regulated, we are concerned with the sustainability issued as related to these places. In order to provide a sustainable use of the floating islands a committee should be established to document these areas throughout Turkey and develop management plans for sustainable use of them. Because of a high tourism potential tourism development plans should be prepared for each of the floating islands and a criteria should be set up to determine the nationally and internationally important areas.

Key words: floating islands, solhan-bingul, osmancik-corum, honaz-denizli, ladik-samsun.

Introduction

What is floating island?

Our earlier studies caused significant rejections whether floating islands are islands or not due to the fact that they move on the river and some of them are rather small. Although they are not similar to the conventional islands in terms of formation and shape, they are supposed to be accepted as islands thanks to their being on a water body as well as being surrounded with water. Though we argue this term has already been used for hundreds of years.

Formation

Island are formed by the substances, which break off from the areas rich in organic materials that are filled by the articles in swamp and lake sides, growing by holding to the hanging water plants.

The moment the formation starts and time passes, some cases like the tightening of the radixes and having a nonwoven pattern, and the sand formation in the process of plants' desiccation-green up, joins and splits complete the formation period of islands. This requires quite a long time. There are various influential factors.

Floating islands are a new term and research subject in our countries geography. Our country is rich in floating islands and, in a way, it is an island paradise. It is possible to come across floating islands and its formations in lakes with various heights and texture in almost every geographical region and area.

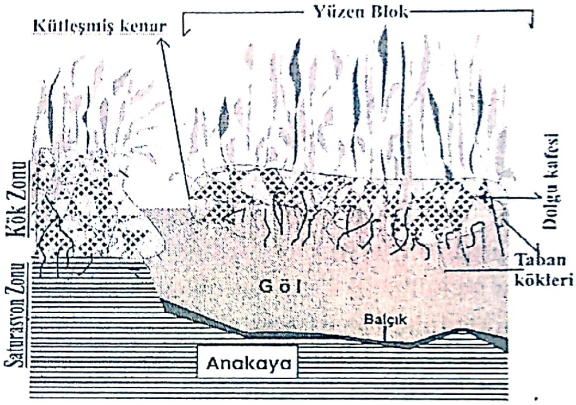


Fig. 1. The simplified schematic formation mechanism of the floating islands

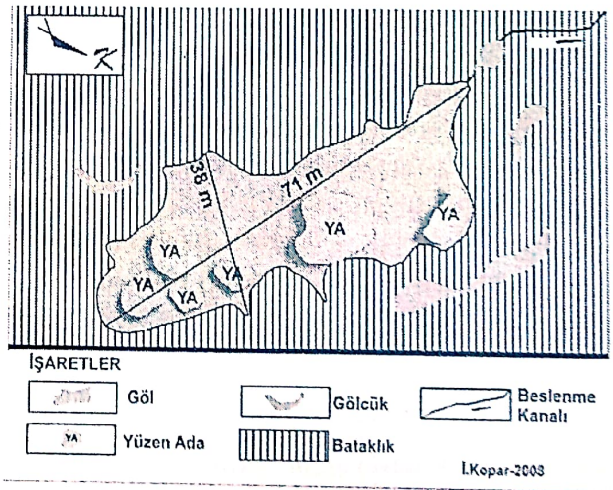


Fig. 2. A view of the floating islands on the lake (Lake Zökün-Tortum-Erzurum)

Despite that, these natural formations have not been able to drive enough attention of researches and public up to now. We will be able to make new contributions to the floating island literature in Turkey and in the world with the studies that we have done so far and the on-going ones. Like our previous floating islands, our present floating islands will take its place in the world floating island bibliography.

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The first information about floating island concept found in item of Aeolus in Dictionary of Mythology. Floating islands is defined in this item as a place where immortal wind god Aeolus was sitting. Described island is near the island of Crete in the Aegean Sea and this island described as of strategic importance due to the floating island is thought to be requested (Erhat, 1993: 21). Encountered in this dictionary for the first time floating island concept, has not been used in terminology and in the scientific sense in Turkey until recently. Starting in 2000 as a result of our research (Girgin and Bulut, 2001: 43–48; Girgin and Bulut, 2002; Duzer, 2006: 13–35) following numerous floating islands to be understood and of interest to this issue to focus our country's geography in terms of recent satisfactory scientific developments.

Early studies about floating islands in Turkey and in the world

It is known that there are floating islands identified by a religious functionary in the area of Della Regina in Italy in 1671 which were investigated between 1684 and 1830; and found in the area of Albule near Tivoli in Italy in 1753 investigated between 1857 and 1889. Thus, it took 330 years for this scientific issue to earn fame in our country. However, Saraçoğlu, H. concluded that there are floating islands in Arsiyan in his book called "Flora, Rivers and Lakes" which was published in Teacher's Book Series by Ministry of National Education of Turkey in 1990. This issue did not attract attention since the books of this praiseworthy geographer, who does not have academic studies, are not read or written.

Examples of floating islands from the world

It is known that Inthan people, who live in the staked houses by Lake Ingle in Burma, formed floating islands for agriculture. Women formed gardens where they grow flowers, tomato, cucumber, bean, cabbage and eggplant on the islands called Kyupaw in Intha language. The islands are stabled in the lake bottom with long bamboos and the sand of the island is enriched with the mud taken from the lake bottom. Those islands are sold when necessary and the people who bought carry the island whenever they want by connecting an engine. Titicaca Lake has seen similar features. It has been opening to the tourism.

Lake Zacaton (Meksika) and Titicaca Lake (Peru-Bolivia)

The floating islands in the dolins near a small town called Aldama of Temaulipas state in the north-east of Mexico are the 15 naturally formed floating islands, which are located in the deepest part of the world (305 m). The lake is 100m in diameter and the diameters of the islands surrounded with 20-metre limestone walls change from 3 to 10 meters. The flora diversity on the islands is founded by the carrying of birds. This island has become a tourist destination for diving, underwater survey, and attracts scientists' attention in terms of investigations. The islands are got together by the lake with a rope in order for them not to scatter by moving.

Our efforts will go on with our fellows as pioneers of these studies in Turkey and geographers, who carried the issue abroad, especially Asst. Prof. Dr. Mustafa Girgin and Associate Professor Dr. Mehmet Zaman, Asst. Prof. Dr. Eyüp Artvinli, Asst. Prof. Dr. Eren Yürüdür, Asst. Prof. Dr. Halil Hadimli and our geography lover friends, who always support our studies like Prof. Dr. İbrahim Yerebakan, Associate Professor Dr. Mustafa Atasoy and Associate Professor Dr. Harun Üçüncü.

• As floating islands are mostly over the usual accommodation level, they are not known except from transhumans and shepherds, their importance is not recognized and stay away from public concern.

• Local people call floating islands "posti" and they are aware of their natural beauty and ecologic significance.

• The region is home to various subjects suitable for further master and doctorate studies with its natural and human aspects.

Floating island, naming in Turkey

In our various areas, floating islands are called:

• Saz, sazak; saz island.
• hopal, hopa.
• wandering island.
• kopak.
• and lakes are called "islander lakes".
• Transhumans locally call the floating islands in the lake as "posti". That's to say, this name is given to the floating areas (islands) which have no relation with lakeside and bottom like lamb and goat skin that has no relation with the body.

The floating islands found after 2000 and the ones we publish.

• Turnalar Lake (Fig. 6).
• Sedeva Lake-Arsiyan Plateu-Şavşat-Artvin (Fig. 10).
• Zökün Lake-Tortum-Erzurum (Fig. 2).
• Lake Mezraa-Kılıçkaya-Yusufeli-Artvin.
• Saklıgöl-Yukarıdağdere Village-Honaz-Denizli.
• Gölbel Lake-Karalargüney-Osmancık-Çorum (Fig. 9).
• Ladik Lake-Ladik-Samsun (Fig. 8).
• Big Lake-Altıparmak Mountains-Koçdüzü Plateu-Çamlıhemşin-Rize (Fig. 7).

• Tens of islands and lakes that we were informed and at the research grade:

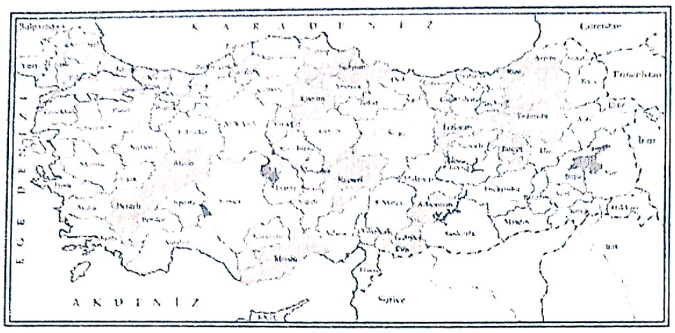


Fig. 3..Distribution of Floating Island in Turkey (2010)

Çat Dam

Floating island formations in Çat Dam are different from the natural lake habitat in many ways (Fig. 5). First of all, these are masses with an average thickness of 3 metres and they are completely blackened in the old lake bowl. So, the clayed tick sand cover over them prevents the plants to get benefit from the water surface and the flora on the islands grow with rain water rather than wetland. The burnings happening in the islands are a natural process encountered in peat beds and they are related with the drying of the upper levels of the floating masses. The islands whose dry flora was burnt could resume by leafing out in spring. However, there is no such possibility for the ones that ran ashore.

Before the dam, the floating islands, reed beds and meadows, which were formed in the peaceful water of the lake with a level to cover the lake bowl in thousands of years, are divided parcels and properties by families like agricultural lands and natural meadows in the valley plain. The thousands of square meter – island, which was used for getting herbs by hundreds of families and as pasture for animals was an important wetland ecosystem, but it was demolished with the building of the dam. As a result of this, many species, maybe the endemic ones, belonged to marshland flora and fauna, became extinct.

• Besides, the picnic fire or other fire reasons occur as the other organic materials burn.

• Therefore, the stabilization of the islands in the middle of the lake prevents their joining with land and running ashore during level changes by keeping them away from shore. Fire danger is minimized. It must be also kept in mind that the best solution is protective umbrellas.

• The precautions to be taken for preventing the destruction of the islands and pollution in the lake are as follows:

• Peat sale must be stopped immediately and banned except from the ones that washed ashore.

• In order to keep the islands away from the shore to a certain extent:

(a) Anchoring to the lake bed connected with the islands.

(b) By lowering the rising level, 7/8 meter – iron or concrete poles must be built periodically beginning from the shore line. This prevents islands from running ashore in these areas.

(c) Binding the islands together by drifting towards the deep, high lake fronts will slow their movements.

• The determination of the number and capacity of the fish nets in the reservoir in accordance with the Environmental Impact Assessment reports must not be in an extent that causes pollution.

• For preventing siltation, disafforestation must be stopped in the dam basin, locust trees must be planted, landscaping and erosion prevention must be provided.

• The islands must be opened for tourism with effective publicity campaigns, and some activities such as water sports, boat trips, boat and sail races, and hang gliding must be started.

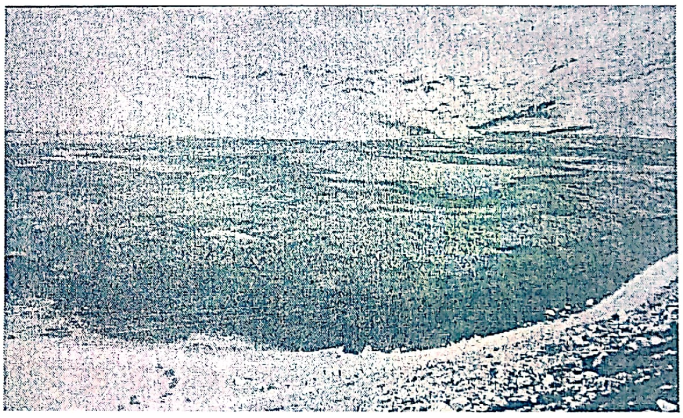


Fig. 4. Abdulharap lake (Celikhan-Adiyaman) before 1996



Fig. 5. Çat Dam Lake (Celikhan-Adiyaman) after 1996 (27.03.2010)

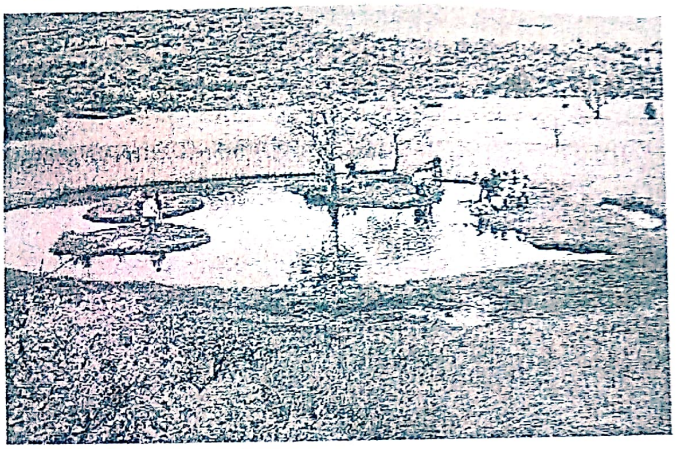


Fig. 6. Turnalar Lake (Bingöl-Solhan-Hazarşah Village)



Fig. 9. Gölbel Lake and Floating Islands (Osmancik-Çorum)



Fig. 7. Big Lake and Floating Islands (Altɔparmak Mountains)



Fig. 10. Sedeva Lake and Floating Islands (Artvin-Şavşat-Arsiyan Plateu)

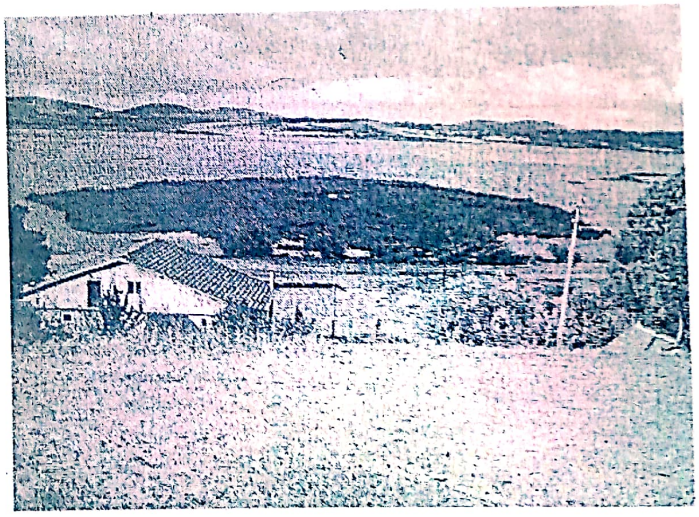


Fig. 8. Ladik Lake and Floating Islands (Samsun)

Evaluation possibilities

- Floating islands are introductory logos, names and landscaping as in the example of Bingul.
- They are a new dimension and area of employment in tourism.
- They are suitable places for environmental projects.
- They could be included in the tour operators' destinations.
- They encourage public's tendency towards touristic activities.
- People who benefit from nature try to help its protection.
- They are an area of international agreement on endangered habitats, and they are a habitat for bird breeding and natural life.
- They are a source of biodiversity.

Results

- It is clear there are many floating island though this matter is newly released in our country.
- These islands are not introduced enough.

• Their flora and fauna as wetlands must be studied by the biologists and limnologist and geologist, zoologist and as well as geographers.

• It must be born in mind that these areas are significant ecosystems.

• The introduction and opening for tourism of these areas are important. However, their protection is more important.

• We must give right to people who regard Turkey as a floating island paradise.

• Floating islands must take its place in the geography subjects and their meaning and importance must be emphasized in dictionaries.

• If the attentions of the geography teachers, who are more evenly spread over the country than the academician geographers are drawn the unknowns of our country will come forward in a very short time.

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