

# YET ANOTHER SPECIES WE KILLED

## SEA DAFFODILS

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**Figure 1:** Sea daffodil is a white-leaved, fragrant flower.

Imagine you are walking on the beach on a soft summer day. On one side you have the clear blue sea and on the other the graceful sea daffodils. Maybe about 20 years ago this scenario could be realistic. However, because of mankind's irresponsible actions not only are our seas not as clean as they used to be but it has become highly uncommon to see the sea daffodils.

We will discuss the reason behind the disappearance of sea daffodils later on. Before that let's talk about an "environmentalist" festival that has taken place recently. Last summer, a festival was organised to draw attention to the beauty of sea daffodils and to the possibility of their becoming extinct. The festival with the sole purpose of raising awareness was nearly fulfilling its purpose until the city hall decided to organize yet another festival, this time for making sandcastles, completely destroying the very same sea daffodils they were trying to protect.

As people were digging up the sand the plants got crushed and the onions surfaced on top of the sand. No one took the time to notice the bewildering scene around them and to stop it before it got too out of hand. The already endangered sea daffodils were left to die in their own natural habitat. We couldn't stay silent in the light of this worrisome event and decided to write this piece. Our first course of action was to interview Prof. Dr. Fisun ÇELİKEL and Res. Assist. Sevim DEMİR<sup>1</sup>, who have been studying the species for six years. According to the information we acquired the sea daffodil (*Pancratium Maritimum*) is a species of plant that grows in the Mediterranean region, in sandy areas. The plant, which lives right on the shore, is exposed to sea breeze, high humidity levels and strong radiation. This has resulted in the plant becoming resistant to drought and salinity. The sea daffodils grow parallel to the sea, on sandy areas about 60 meters away from the shore. They can't survive in an area far from the sea or with a different climate. Therefore it has a very limited space to survive.

It might appear that the species going extinct isn't a concern for people but its use in many

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different industries (including pharmacology and textile) would prove otherwise. As reported by our interview, it's also revealed that the unique plant could be used for treatments for diseases such as cancer, Alzheimer's and AIDS in the future. How well do you think our society can comprehend the importance of this species that is so valuable to us? Unfortunately, due to the coastal tourism, urbanization, the unconscious picking of the plant and the collecting of the onions to grow them at home is proposing a greater danger to the species every year. When asked to Demir and Çelikel, we understand that the biggest threat to the plant is the tourism activities on the coastline.



**Figure 2:** Tourism activities are causing serious damage to the sea daffodils.

As we expand our area of research we can see that the same problem isn't only evident in our country but in others as well. D. Eisikowitch and J. Galil<sup>2</sup> warn us to be more wary as the species' population has largely decreased in Italy, Spain and France, who have stated the biggest threat was coastal tourism due to the plant's habitat. On the other hand, people picking the plant without awareness also puts the sea daffodils under great risk. The picking causes the plants to be taken away from their habitat, leaving them unable to reproduce. Once again we can figure out that urbanization on the Mediterranean coastline and picking of the plant are two of the more noticeable reasons behind the decrease in numbers of the plant, according to an article by Di Maio and De Castro.<sup>3</sup>

Even though our country has realized the danger and is taking precautionary measures, it's obvious that the public isn't fully aware of the situation yet. As an example, the reproduction of the plant with tissue culture has been at work since 2006 and the first study in our country was done by Cevdet Gümüş<sup>4</sup> and Ş.Şebnem Ellialtıoğlu<sup>5</sup>. Moreover, our country currently has a project called "Sea Daffodil Species Observation" run by the Environment and Town Planning Ministry. Alongside this, people guilty of picking the plant or damaging its habitat can be fined 48 thousand liras under the environmental law. Besides that, it is illegal to pick sea daffodils to export them to other countries in Turkey. Sadly, the legal precautions aren't enough to prevent the decrease in number of sea daffodils.

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<sup>2</sup> Tel Aviv University

<sup>3</sup> Antonietta Di Mario, Olga De Castro; University of Nepals

<sup>4</sup> Bartın University, Bartın, Turkey

<sup>5</sup> Ankara University, Ankara, Turkey



Figure 3: The sea daffodils grow parallel to the sea, on sandy areas about 60 meters away from the shore.

We are under the impression that people are not sensitive about laws. To give an obvious example, one can see constructions for touristic reasons closer to the sea although the urbanization has to be at least 50 meters away by law. Though there are iron traps at some beaches, in most cases we can't see even the slightest bit of precaution. It is possible to make the sea daffodils habitat much safer by stricter law enforcement. Announcing the preventative measures to the public and raising awareness is an important step. This can be accomplished by public service announcements and striking posters. Another point is, before building thermal and nuclear reactors (which have to be close to the sea) to check the area and see if any of the plants would be damaged. In an effort to make sure the coasts are safe enough, ministries should form committees made up of teenagers and adults.

We hope that people will become more aware of not only sea daffodils but other endangered species as well and that they will take action to protect these species. We wish luck to all the creatures trying to survive on earth.

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