

Toward Natural Restoration in Yumeshma
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This is a report on the Yumeshma issue since the December/January issue of this magazine. The main focus is on the progress of the Environmental Impact Assessment (hereafter referred to as "Assessment") and cooperation with nature conservation groups.

Mayor's Opinion on Environmental Assessment: Preservation and Creation of Diverse Habitats such as Wetlands, Grasslands, and Gravel Ground

We reported on the assessment brief of the 2025 Japan Association for the 2025 World Exposition (Expo Association) in the January issue of this magazine. The mayor prepares the mayor's opinion based on the opinions of an expert committee of academic experts and citizens. An important part of the assessment is to scientifically and quantitatively predict the impact of the project on the environment, and if there is an impact, to show how to avoid or mitigate it.

Unfortunately, the Draft Environmental Impact Statement published by the Expo Association does not correctly assess the impact on flora and fauna. Even though 66 important bird species were identified, many of the statements were taken out of line with the basics of the assessment, such as "there will be no impact because they are also in the Nanko Bird Snactuary^{*}" or "there is no need to worry about plovers' food because they will create a forest. We submitted our opinions and made public statements in accordance with Osaka City procedures. The Osaka branch of the Wild Bird Society also made a public statement. Citizens showed great interest, and 118 letters of opinion were submitted.

The mayor's opinion was submitted on February 9. The opinions on plants and animals are shown in Table 1.

Table 1: Mayors' Opinions on the Draft Environmental Impact Statement
[Animals and ecosystems]

Since a wide variety of bird species have been recorded in Yumeshma, a roadmap should be drawn up by the start of construction, taking into consideration the habitat and growth environment of these bird species, while listening to the opinions of experts, etc. The roadmap should include details and a schedule for the development of the wetlands, grasslands, gravel ground, and other diverse environments to be preserved and created.

[Plants]

If the habitat is expected to be affected by the construction of this project, conservation measures shall be implemented after consulting with the relevant organizations.

Discussion with the Administration: Consideration not only for the little tern but also for snipe and plover

On December 28, Nature Osaka sent a letter of request to the Osaka Prefectural and Municipal governments and the Expo Association to promote the registration of the area as a Ramsar site. The summary of the letter is as follows: (1) We request the overall conservation of the natural environment in and around Yumeshima, an important biodiversity hotspot, both during and after the Expo. (2) We request that Yumeshima be registered as a Ramsar wetland as a legacy of the Expo and that Osaka become an SDGs advanced city.

In response, the Osaka Port & Harbor Bureau sent a response dated February 16. The summary is as follows: (1) The mayor's opinion is based on the points raised by the expert committee, and the project operator will prepare an evaluation report based on this opinion. (2) After the Expo, the project will consider how to deal with the situation, based on Yumeshima Zone 1 (Green Terrace Zone), while listening to the opinions of experts to see if it is possible to secure a flying site for little terns and a habitat for Kawatsurumo (*Ruppia maritima*). (2) For Yumeshima Zone 2, land development will be resumed after the Expo and the land will be used as an international tourism base and international logistics hub, so it is difficult to designate the wetlands created during the land development process as Ramsar Convention registered wetlands.

On February 18, we exchanged views online with the Osaka Port & Harbor Authority. They explained the future construction schedule. According to the plan, the ponds in Zone 2, where reed beds and salt marshes have been located and where the Japanese snipe has bred, will be partly filled in and mostly drained and then resurfaced (Figures 1 and 2). This will make it impossible for waterweeds to grow and for shorebirds and plovers to inhabit the ponds. The mayor's opinion in the environmental assessment states that "a roadmap of maintenance details and schedule shall be prepared with consideration for the habitat and growth environment of birds," but the Port Authority's construction plan lacks consideration for many bird species. However, they did suggest that the Green Terrace Zone in Zone 1, where incineration residue is landfilled, could have a variety of functions. With regard to the breeding of the little tern, the area where the expo site will be located will not be constructed during the breeding period in 2022, but since solidifying paint will be applied to prevent soil dispersion, it is not known whether the terns will be able to lay eggs. However, it may be possible for them to lay eggs in the area where the adjacent reed beds have been reclaimed and the ponds in the Zone 3 have been reclaimed. In any case, we believe that we need to conduct a survey during the little tern's arrival period and take flexible measures to enable breeding.



Fig. 1 Habitats of birds



Fig. 2 Site plan of Expo 2025

Collaboration with nature conservation groups: from Wildlife Protection Area designation to Ramsar registration

Nature Osaka also called for cooperation from WWF Japan, the Nature Conservation Society of Japan, the Wild Bird Society of Japan, its Osaka branch, the Japan Institute of Landscape Architecture, and others. As a result, these organizations submitted a letter of opinion to the Osaka Prefectural and Municipal governments and the Expo Association regarding the protection of nature on Yumeshima (URL at the end of this document).

On January 20, the Nature Osaka, the Japanese Institute of Landscape Architecture, and Nature Osaka jointly had an opportunity to meet with Mayor Matsui, stressing the importance of the wetlands on Yumeshima and urging him to promote the registration of the area as a Ramsar site. The mayor made it clear that he would not destroy the environment, but that economic interests were also important. However,

he stated that he would like to protect the breeding of the little tern. He said he would study the Ramsar Convention. On the same day, these three organizations also met with the head of the Ministry of the Environment's Kinki Regional Environment Office to exchange views on the possibility of Ramsar registration.

The Ramsar Convention and the Shorebird and Plover Critical Habitat Network are the frameworks for protecting wetlands where waterfowl fly. To be listed as a Ramsar wetland, a site must meet one of nine criteria. Criterion 6 is a wetland that regularly supports at least 1% of the population of one species or subspecies of waterfowl, and Yumeshima to date has received 5,000 pochard, which is 1% of the East Asian population of this species, or exceeding 3,000 birds. In 2011, 3,000 little terns flew into the area, exceeding the 1% threshold of 1,000. Other shorebirds and plovers have not been confirmed, but together with the Nanko Bird Sanctuary, there may be some species that meet the criteria. In Japan, in addition to meeting the (1)above criteria, the following conditions are required for registration: (2) the natural environment must be preserved in the future in accordance with national laws (e.g., the Natural Parks Law and the Bird Protection and Management Law), and (3) the local residents and others must approve of the registration. Regarding (2), since Nanko Bird Sanctuary is not designated as a Wildlife Protection Area, it is necessary to designate Nanko Bird Sanctuary as a wildlife Protection Area and Yumeshima, which will naturally regenerated after the exposition, should also be designated.

Based on the United Nations goal of designating 30% of each of land and sea as protected areas and regenerating 20% of degraded ecosystems, it would be of great international significance to restore tidal flats and other diverse ecosystems on Yumeshima in conjunction with the Osaka Nanko Bird Sanctuary. To realize this goal, let's develop the movement in cooperation with other organizations.

* Nanko Bird Sanctuary is located in Sakishima Islands, 1 km southeast of Yumeshima.

WWF Japan <https://www.wwf.or.jp/activities/statement/4759.html>

Nature Conservation Society of Japan <https://www.nacsj.or.jp/archive/2021/11/12491/>

Newsletter, "Toshi to Shizen" No. 531 (2022/4,5) published article.