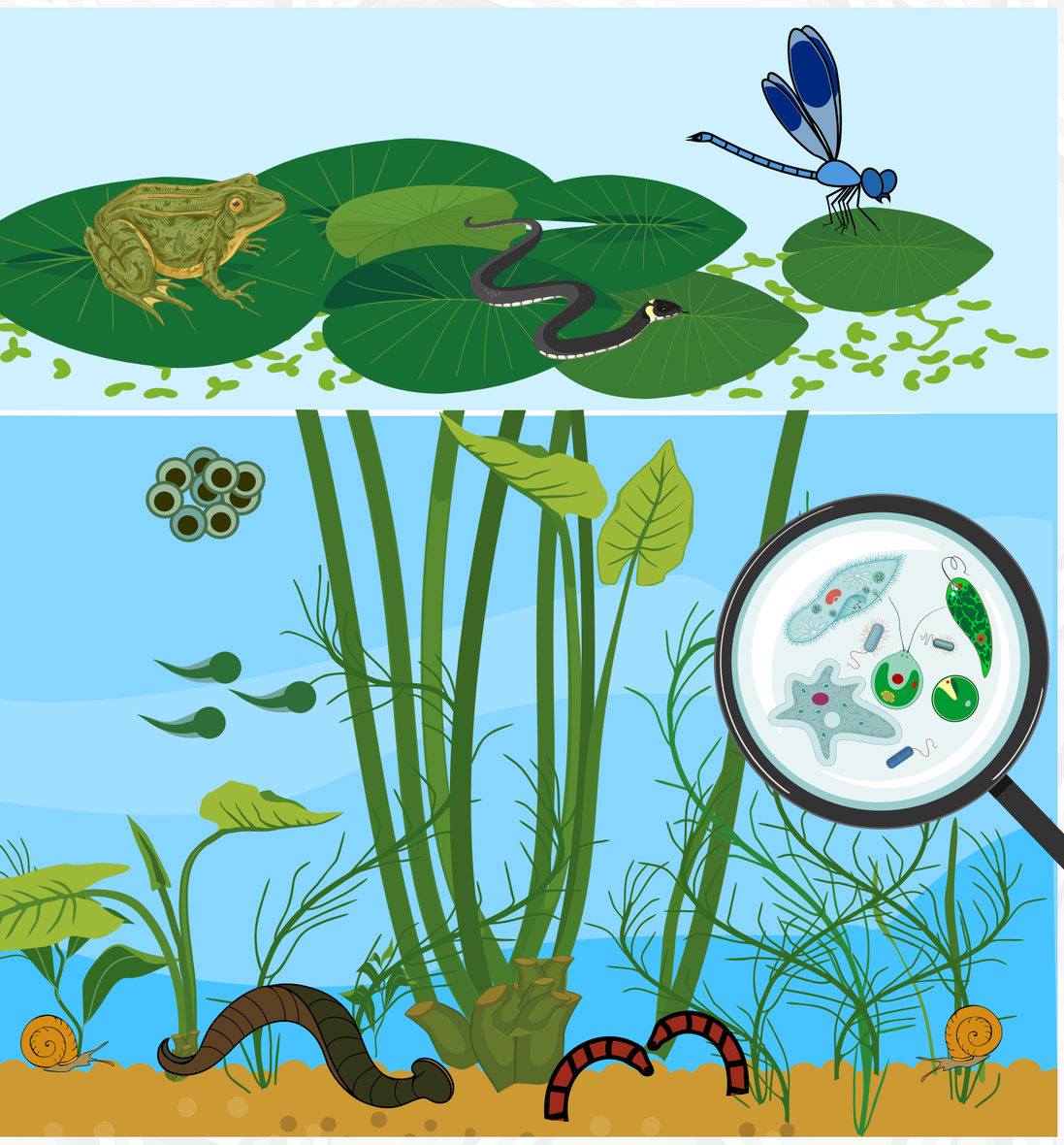
Naturalization of water features

Ever since construction of the monument began almost eight centuries ago, the water it requires for irrigation and decorative purposes has come from the River Darro, with which it has important links, not only in terms of history but also as regards landscape and ecosystems.

Water features are an essential part of the cultural heritage of the Alhambra and the Board of Trustees of the Alhambra and Generalife (PAG) wants the management of these spaces to be exemplary too, both from an environmental point of view and as a prolongation of the extraordinary wildlife for which this area is known.

With this in mind, we have been working for many years now on the naturalization of the water tanks, rivers, fountains and water channels dotted around the entire monument complex. At present (2024), 33 water bodies with an approximate volume of 3,150 m^3 are benefitting from this initiative.



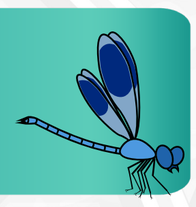
The method is based on the lessons learnt from nature itself and on excluding products such as chlorine and algicides.

Actions that have been carried out:

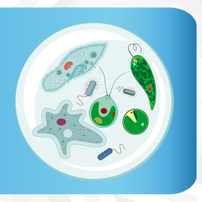
06 Encouraging the establishment of populations of amphibians (toads, frogs, Iberian ribbed newts) and reptiles (viperine water snakes) that help ensure a satisfactory organization of the trophic networks and enhance the natural value of the water space.

05 Planting native aquatic plants that act as a green filter.

04 Encouraging the presence of predator aquatic insects such as “water boatmen”, “skaters” and others and dragonflies and damselflies that catch the larvae of mosquitos or pests such as the waterlily aphid.

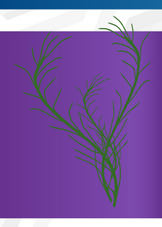


03 Increasing the animal fraction of the plankton (zooplankton), which feed on unicellular algae and fungal spores and are a vital agent for maintaining the ecological balance of the aquatic environment.



02 Increasing the presence of freshwater snails and water worms, organisms that feed on detritus and dead leaves, and in this way recycle organic matter.

01 Laying out underwater meadows of oxygenating algae (Characeae algae).



All of these are aquatic ecosystems that form part of a network connected with the Darro River Valley and provide important benefits for the monument and its surrounding natural area.

They are also an example for the achievement of the Goals on the United Nations 2030 Agenda for Sustainable Development:

- **3. Health and wellbeing**
- **6. Clean water and sanitation**
- **11. Sustainable cities and communities**
- **15. Life on land**

Every single one of the pieces mentioned above has its own specific place and its own specific function, so as to make an effective contribution to the stability of the whole and to the achievement of the goals being sought:

- **Keeping the water clean and transparent.**
- **Maintaining water heritage features of great aesthetic quality.**
- **Creating spaces rich in biodiversity.**
- **Controlling mosquitos and other pests.**
- **Benefitting the communities of insectivore birds and bats in the area.**
- **Collaborating with the environmental administration in programmes for the conservation of endangered species of fauna.**

Junta de Andalucía | Consejería de Cultura, Turismo y Deporte | Patronato de la Alhambra y Generalife

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