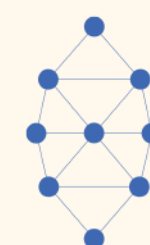


5.ª Conferência Internacional da Rede de Museus da Água  
5th International Conference Of The Global Network Of Water Museums



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Porto.

# Nature journalism and wetlands: how nature journals can contribute to a better understanding of wetlands' ecological value

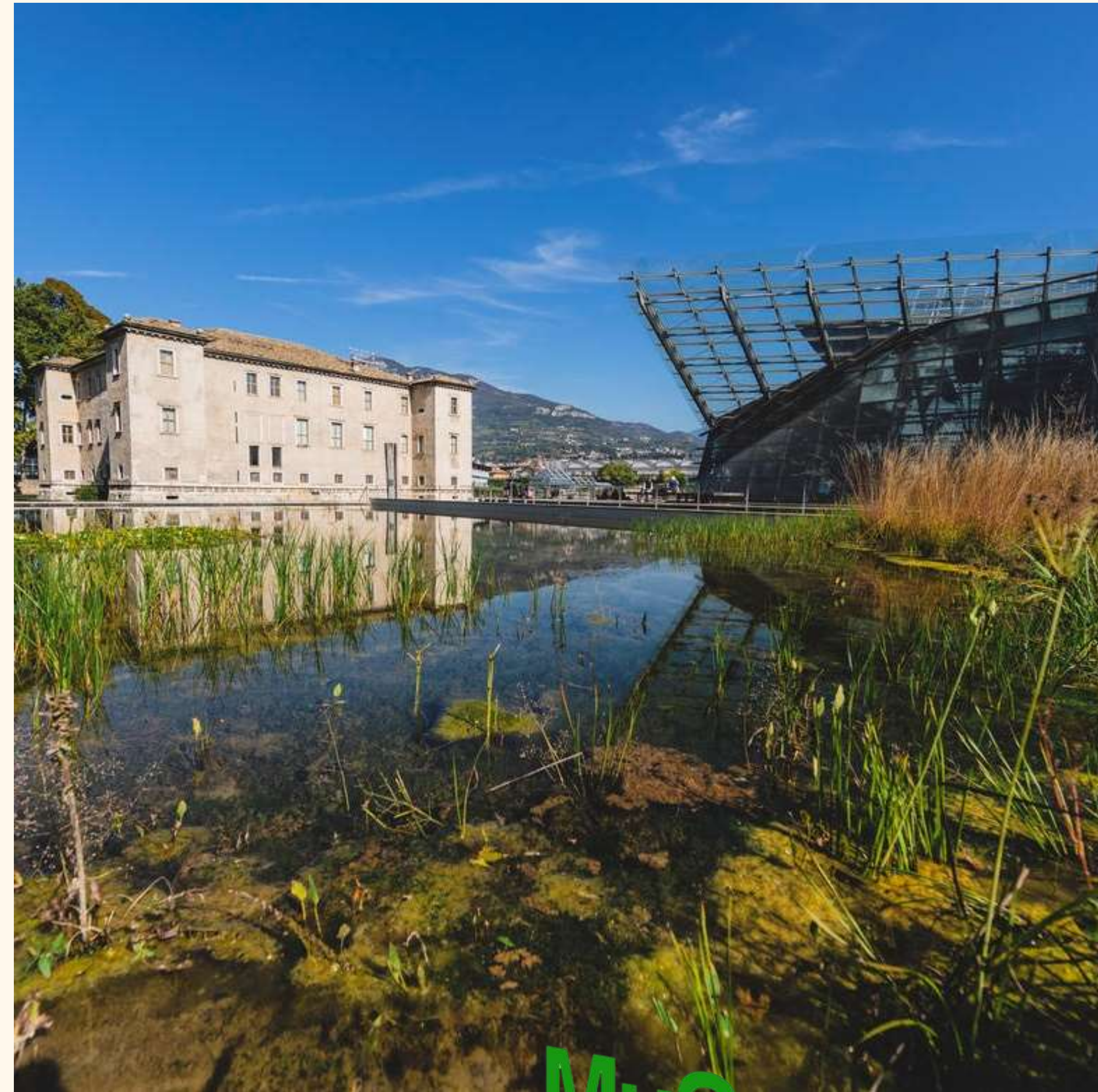
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## Where we started: the MUSE pond

- **Opening year:** 2022
- **Surface area:** 2000 m<sup>2</sup>
- **Num. of aquatic and wetland plant species:** approx. 80 species
- **Individuals planted:** more than 4000
- **Number of habitats made according to the Natura 2000 classification:** 7 (cod. 3130, cod. 3150, cod. 3230, cod. 6410, cod. 6430, cod. 7210, cod. 91E0)
- **Animals:** no introductions, but spontaneously appeared: amphibians (*Bufoetes viridis*), insects (dragonflies - *Crocothemis erythraea*, *Coenagrion hastulatum*, Gerridae, *Dytiscus* sp., lepidopterans – *Vanessa cardui*, *Vanessa atalanta*), birds (*Anas platyrhynchos*, *Ardea cinerea*, *Gallinula chloropus*, *Passer x italiae*, *Carduelis carduelis*, etc.), mammals ...





## Our goals:

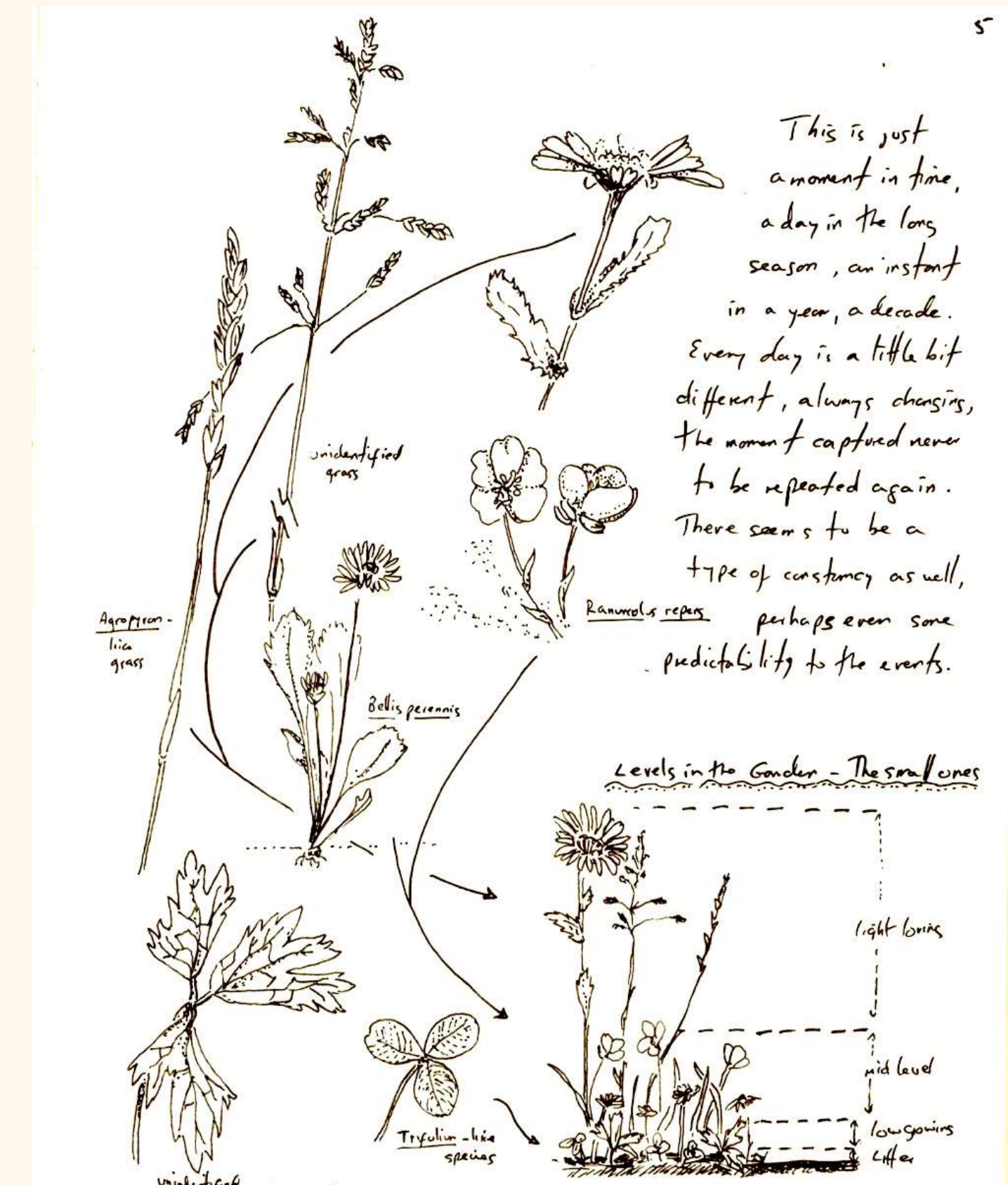
- To tell the **naturalistic value** of the biotope through the practice of **mindful exploration**;
- Invite a **slow** and **curious approach** to valley bottom wetlands;
- To realize a **versatile** tool **adaptable** to **multiple contexts**;
- Stimulate **creativity**, **self-awareness** and **multi-sensory approach**.



# What is nature journaling?

Nature journaling is **regularly recording your observations, feelings, and perceptions** of the **natural world around you**.

For centuries, **nature journals have accompanied scholars, researchers, poets, writers, geographers, historians and philosophers** in their explorations of the environment and the world. A tool that has retained its appeal and its pedagogical, educational and formative power **despite the passage of time**.



## Why did we come up with a nature journal to enhance a wetland?

- Today, as then, it is a valuable tool for **exploring the environment** and **recording observations**;
- To encourage **curiosity** and **creativity**;
- It is suitable for **different audiences**: families, students, artists, scientists, individuals, groups and anyone who is curious or passionate about the practice of nature journalism;
- It is a tool that **facilitate interaction** with the natural environment, all forms of life, observation, listening, knowledge and feelings of **fascination**, belonging and **biophilia**.



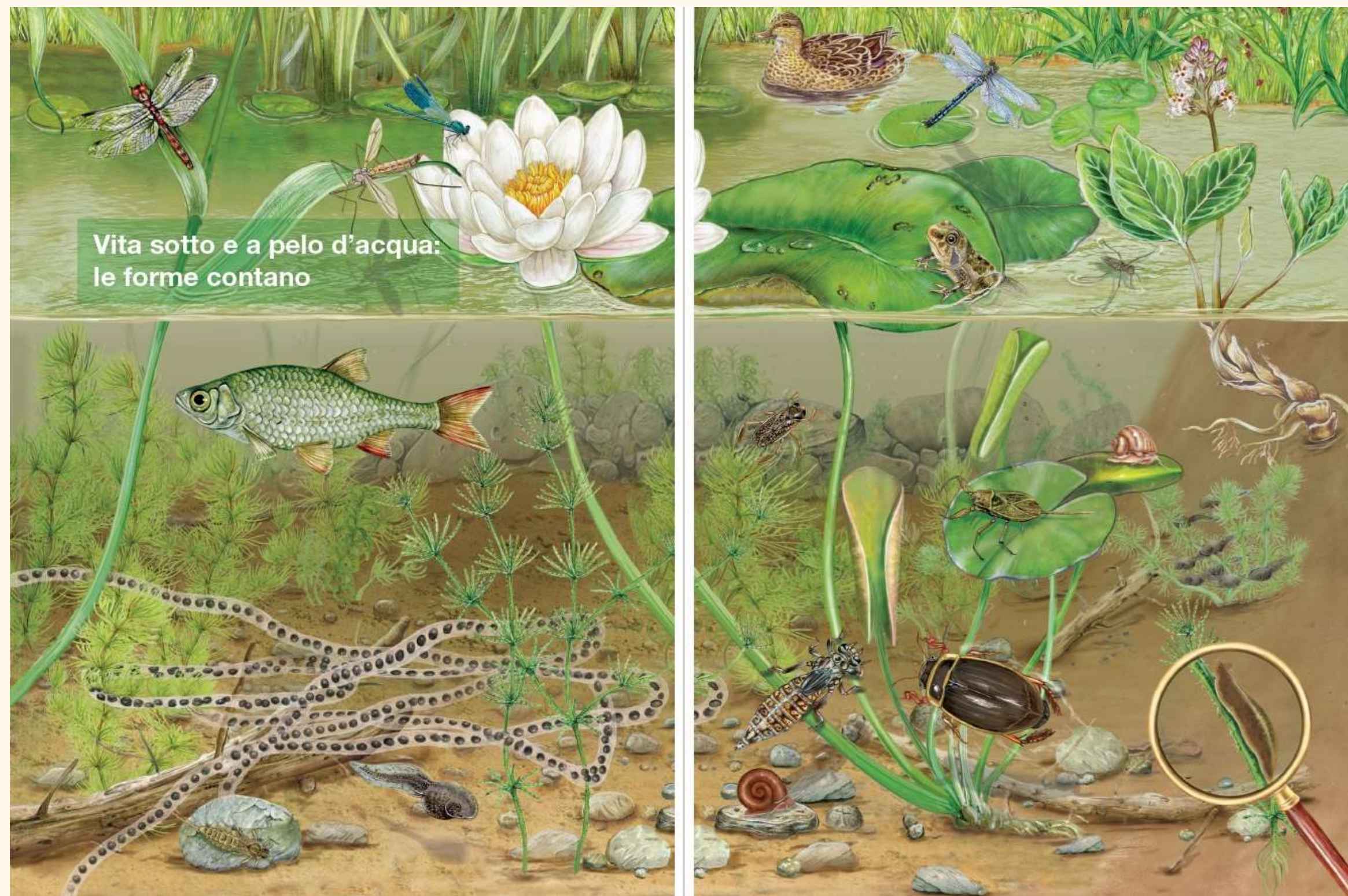


“Diario di Natura” is a **booklet** inspired by the practice of **nature journaling**, offering **various activities** aimed at exploring wetlands in a conscious way.

It was designed by a team of MUSE **science communicators** in collaboration with two **nature illustrators**, a **graphic designer** and a **print shop**.







### Diario di Natura

#### Il segreto del becco per un boccone perfetto

In base alla forma del becco, ogni specie di uccello è specializzata nel consumare un particolare alimento. Ci sono uccelli principalmente **insettivori** con becchi sottili e appuntiti, altri, detti **granivori**, che si nutrono di semi con becchi corti e robusti, altri ancora abili **predatori**, come i rapaci notturni e diurni, muniti di un forte becco ad uncino e infine uccelli **"pescatori"** con becchi lunghi e sottili per infilzare la preda.

Ecco alcuni esempi:



### Il biotopo MUSE di Trento

#### ESERCIZIO

Basandoti sulle immagini della pagina precedente, collega ogni specie di uccello con l'alimento di cui si ciba.











## Format: examples

### What's the weather today? How do I feel today?








**Benvenute e benvenuti,  
inizia l'esplorazione**

Data \_\_\_\_\_ Ora \_\_\_\_\_ Stagione \_\_\_\_\_

**Oggi il tempo è...**

<input type="checkbox"/>  Sereno soleggiato	<input type="checkbox"/>  Nuvoloso variabile	<input type="checkbox"/>  Nebbioso	<input type="checkbox"/>  Piovoso
<input type="checkbox"/>  Nevoso	<input type="checkbox"/>  Vento		

**Oggi mi sento...**

<input type="checkbox"/>  Felice	<input type="checkbox"/>  Molto felice	<input type="checkbox"/>  Pensierosa/o	<input type="checkbox"/>  Triste
<input type="checkbox"/>  A disagio	<input type="checkbox"/>  Arrabbiata/o	<input type="checkbox"/>  Motivata/o	





## Format: examples Listen to the soundscape

Il biotopo MUSE di Trento

**Chiudi gli occhi e ascolta  
il paesaggio sonoro**

Fermati in un punto del Biotopo e stai in silenzio.  
Chiudi gli occhi e ascolta attentamente per due minuti.  
Apri gli occhi e inserisci in questa "mappa sonora" i suoni che hai ascoltato.

**Esercizio**  



**Suggerimento:**  
puoi scrivere i suoni in modi diversi,  
con il loro nome (es. "macchina"),  
con un disegno oppure con i suoni  
**onomatopeici** ad esempio: "brum brum".



19






## Format: examples Shadow Tracing

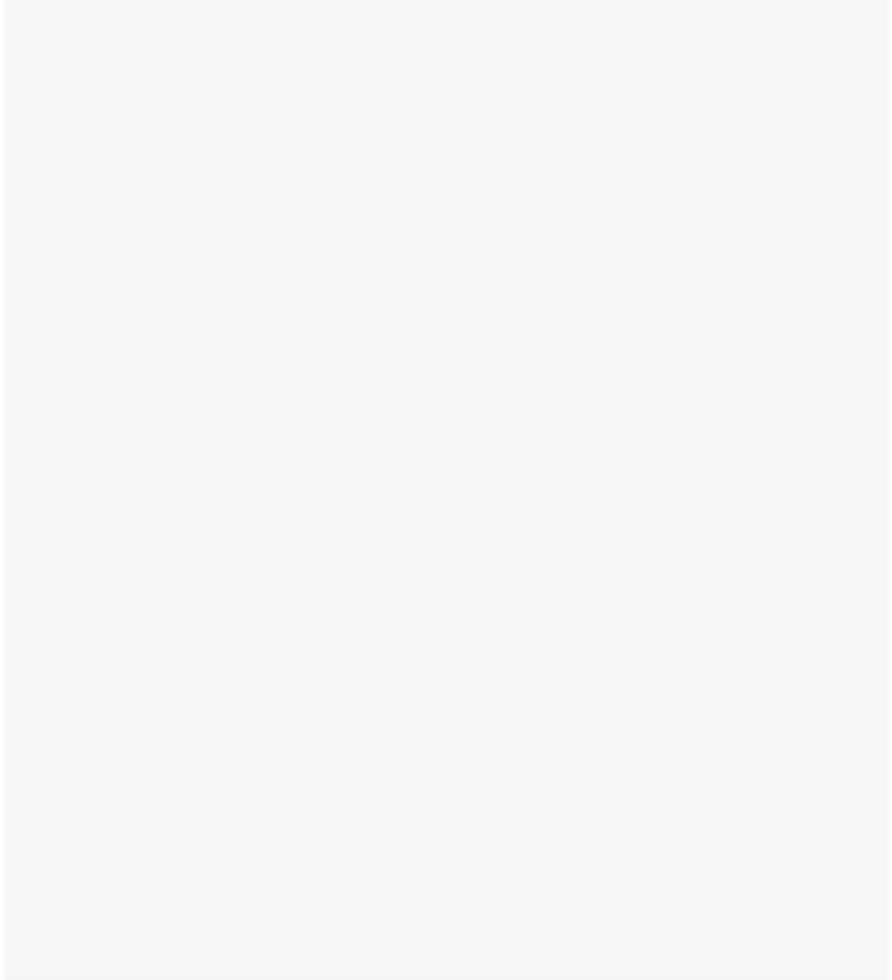


Il biotopo MUSE di Trento

### Shadow Tracing: traccia l'ombra

**Esercizio** 

È una giornata soleggiata? Se sì, scegli un elemento vegetale del Biotopo; posiziona questa pagina sotto o a fianco ad esso finché non vedi la sua ombra proiettata sul foglio. Tenendo la pagina più ferma possibile, ricalca il bordo dell'ombra e poi colora.



25





- **Pupils aged 8 – 13 years:** two-hour workshops using a variety of materials, including microscopes and lab equipment to observe live plankton samples, in addition to some nature journal activities;
- **School groups** who wish to discover the MUSE Biotope and the wetlands on the valley floor independently;
- **Families:** the “Diario di Natura” will soon be available in our store and can be used freely in the Muse biotope as well as in other wetlands on the valley floor;
- **Teachers:** two training sessions for all interested teachers on Outdoor Education and the importance of connections between humans and nature;

### Diario di Natura e Citizen Science


Due approcci educativi per conoscere, connettersi e affiliarsi alla natura

Corso formativo in due appuntamenti, per **tutte e tutti i docenti interessate/i**, sul tema dell'*Outdoor Education* e dell'importanza della connessione *sapiens-natura* con il **Diario di Natura** e la **Citizen Science**.

Strumenti che facilitano l'interazione con l'ambiente naturale, con tutte le forme di vita, l'osservazione, l'ascolto, la conoscenza e i sentimenti di fascinazione, affiliazione e biofilia.

**Mercoledì 16 ottobre dalle 16.30 alle 18.30 al MUSE**  
**Mercoledì 30 ottobre dalle 16.30 alle 18.30 al MUSE**

[Scopri di più](#)





Nature journaling **can value the uniqueness of each of us**: it allows people to choose the activities that best suit their characteristics and enables information to be reported in the way that is most appropriate for each of us.





## Evaluation:

The project is in its final phase and the “Diario di Natura” is currently being printed. Last school year, we tried out the activities with around ten classes of both primary and secondary school and **asked for feedback** to both **pupils** and **teachers** at the end of the activity, which was always positive.

We are starting this year:

- Evaluation by **teachers** using a questionnaire given via a QR code at the end of the activity;
- Evaluation of the structure of the activity by **educators** who carry it out in the classes;





## Could Nature Journals be applied or transferred to another context?

“Diario di Natura” itself could be used in all wetlands in the valley floor of our region within a certain altitude, as the species found there are about the same as in the MUSE biotope.

**The format could be reused for each habitat type and geographical context.**







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**Illustrations:** Annalisa e Marina Durante – Duranteillustrations

**Graphic design and layout:** Roberto Nova – BigFive Visual

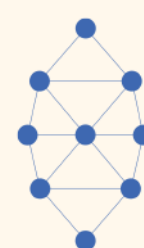
**We thank:** Andrea Zignin, Francesca Paoli\*, Alessandra Franceschini\*

\*MUSE – Museo delle Scienze di Trento





obrigado  
thank  
you



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