

Network Nature Nature-based Solutions Comics

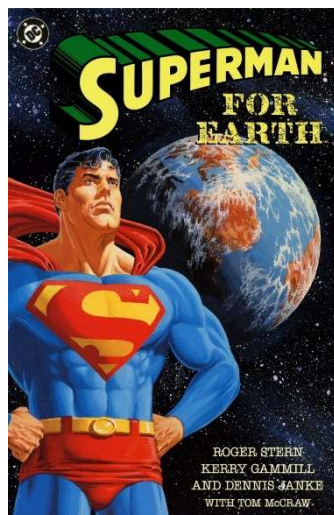
2023 Report

David Maddox, *The Nature of Cities*

Nature-based Solutions Comics

Why Nature-based Solutions (NbS) comics are relevant as an educational resource

Five hundred million is a (very rough) estimate of the number of comics (of all kinds) read in the world at least monthly. For example, 37% of people in the USA read comics at least monthly; 46% of South Koreans read comics at least weekly; 50% of teenagers in France read Manga. The global market for comics in 2019 was estimated at almost \$US17 billion and is expected to grow. In other words, a lot of people read comics. This presents a great opportunity for scientists, practitioners, educators, and activists in environment and social practices to share, in collaboration with comic artists, important stories with more people.



Around the world, we continue to struggle with pervasive and insidious challenges with environmental degradation. We need to talk and communicate more, certainly, and do so in new ways that reach new people and in modes that reach them where they are, in forms that are attractive to them. As scientists and activists, we need to learn how to become better storytellers; or collaborate more with better storytellers.

Although the comics landscape is dominated by superheroes doing classic superhero things, there is a growing movement of comics that have environmental and social justice aims. [The Nature of Cities](#) and [NetworkNature](#), as part of the Education Semester

Theme, launched the comic series “NBSComics—Nature to Save the World”. Other examples exist, including “Rewriting Extinction”, a remarkable series of comics on biodiversity loss with a community of over 300 artists, scientists, and storytellers. “Le Monde Sans Fin” (“World Without End”), by artist Christophe Blain and scientist Jean-Marc Jancovici, is a best-selling graphic novel exploring energy and climate change. There are strong examples of environmental justice comics also, including “The Environmental Justice Chronicles”, by Rebecca Bratspies and Charlie LaGrec.

Comics offer a unique and effective platform for addressing social and environmental challenges through storytelling. Sometimes called “explainer comics”, the combination of visuals and narratives in comics provides a dynamic and engaging medium to convey complex issues in a compelling manner. The visual nature of comics allows for the vivid representation of social and environmental challenges. Artists can depict the consequences of pollution, deforestation, or social inequality, bringing these issues to life and creating a lasting impact on readers. Their pacing allows people to contemplate and think between panels (unlike movies, which drive relentlessly forward). And, importantly, they can do so at a human-scale and in entertaining ways, engaging not just the heads of readers, but their hearts. They can capture the emotions and experiences of individuals affected by these challenges, fostering empathy and understanding.

How the process went

ICLEI approached David Maddox and The Nature of Cities in June of 2023, interested in using end-of-project money from NetworkNature for educational products. It was decided to pursue comics as a medium to tell important and knowledge-driven stories about Nature-based Solutions. An open call was announced in October 2023 for comics that had at least one Nature-based Solution at the heart of their plot. The categories of NbS created by the EC were offered as guidance to submitters. Further requirements of the comics were that they be human-scale and entertaining as stories. That is, we were calling for good stories involving NbS, not infographics that use the techniques of comics. The original call can be seen [here](#). A 25-person advisory group was created, made up of diverse stakeholders: scientists, practitioners, comic creators, and artists; ages that spanned 17 to 64. This group was the jury that reviewed and selected the comics, using a multi-stage rating system devised by TNO.



Seven comics were ultimately chosen, from Spain, Ireland, Italy, and Slovenia (Figure 1). The comics all have an NbS at the center of their human stories. There is a comic (“Sound of a River”) about a young girl whose house floods; she talks with an Otter about why the river floods and what can be done. The story is about “rewilding”, but this technical term is not used inside the comic. The girl starts to aspire to become an ecological wetlands engineer. In another story (“Planting Mission”), two young women at a shade-less bus stop hatch a plan that turns into a green street. In “The Plot”, a community takes charge of an abandoned lot and makes a park for themselves and for biodiversity.

All seven of the comics exist on a website of our design called NBSComics.com (Figure 2). Two design features are key to how the comics can spread [knowledge](#) about NbS. First, all of the comic creators chose to write their comics in English. But the entire scripts are embedded in each comic (Figure 2), so Google Translate can be

used to have any language appear immediately adjacent to the comics. Such language accessibility is beyond the reach of our limited budget, but is made possible here in the innovative website design.

Second, at the bottom of each comic there are notes and links to further information about the NbS ideas at the heart of each story. The comics function as knowledge-driven entertainment, but if a reader becomes interested, we provide routes to further exploration. This is key for a product intended to be used in education: draw students in while offering them doors to further knowledge.

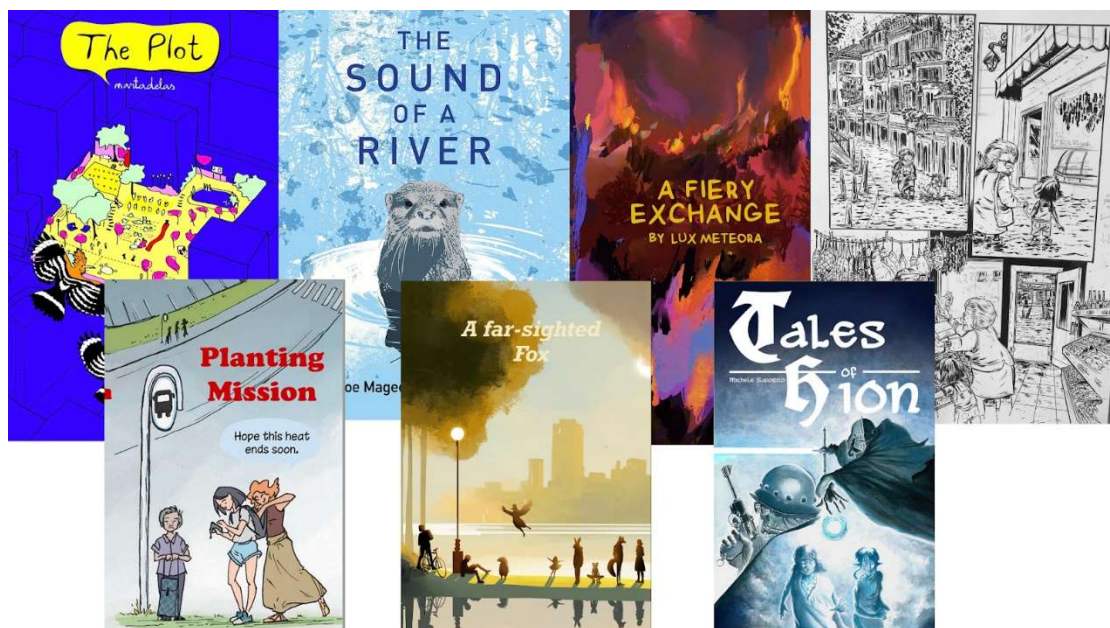


Figure 1 The covers of the seven commissioned comics in 2023.

What were the main outcomes and lessons learnt

The comics and the overall approach has been very well-received, both at the launch (at the NetworkNature closing event in Brussels, June 2023) and in the readership online. Since the launch, NBSComics has been read over 88,000 times. Social media engagement has been strong. There is much room to grow.

We learned that NbS comics is still a very elusive concern for most people outside the technical fields. A failing of many of the original comic proposals was that they did not really address NbS; often they were more about generic concern for nature. Even with the seven comics we commissioned, TNOC staff (which includes comic creators and a playwright) helped the creators craft the stories toward telling human-centered NbS themes. This learning will help us craft the text of future calls.



Figure 2 The landing page of the Nbs Comics website, shown with French chosen as the display language.

A second learning is that scientists and practitioners are intrigued by this method of storytelling. TNOc, along with two comic artists, offered a workshop on “Visual Storytelling” at NetworkNature’s final event. There was enthusiasm for telling Nbs stories in new ways and working with artists to do so. Since the NbsComics launch, a number of scientists and practitioners have approached TNOc with ideas for collaboration.

Next steps

TNOc joined the next phase of NetworkNature as a full partner in September 2023. It is our intention to continue comic and art-based approaches to Nbs communications and outreach. Several “next steps” are planned:

1. We have published a repeat call for new NbS comics, with text modified by our lessons learned. We imagine that we will commission 5-10 new comics using this method in 2024.
2. We are contemplating a new stream of commissions in which comic artists and scientists are put together as teams to tell new NbS stories. The text of such a call was drafted for review by the NbS Comics advisory group.
3. After another year or two of learning, we imagine inviting open submissions of existing comics (that is, previously created but unpublished) on NbS themes. This will allow us to grow the roster of useful comics more quickly.
4. We plan to continue the growth of readership in NbS Comics, using social media channels, but also by engaging new partners in the project.
5. Specifically seek education scholars and organizations interested in engaging with us on this work. This could include collaborating with other EC project consortia, such as [NBS EduWORLD](#). Such partnership would help the spread of the comics and also possibly provide new ideas for calls.

Network Nature



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 887396 and from Horizon Europe under grant No 101082213.



UK Research and Innovation

This project is funded by UK Research and Innovation (UKRI) under the UK government's Horizon Europe funding guarantee.

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