

# 12 QUESTIONS TO INGO KOWARIK

## 1. From your point of view, what are today's most pressing environmental problems?

The loss of biodiversity from local to global scales, primarily driven by habitat destruction and overexploitation of natural resources, and further exacerbated by climate change. At an unprecedented rate, animal and plant species are disappearing, along with the ecological functions associated with them. This is jeopardizing the resilience of ecosystems, which is urgently needed in times of climate change. Conserving and promoting biodiversity – beyond simply planting trees – should therefore be integrated into all approaches to tackling the environmental crises.

## 2. When looking at potential improvements in our environment, what gives you hope?

What gives me hope is the resurgence of environmental social movements as drivers of socio-ecological transformation – necessary to solve global environmental problems. Furthermore, the power of nature also gives me hope. As an urban ecologist, I am optimistic about the emergence of new kinds of urban wilderness, even after the total destruction of habitats. Unprecedented combinations of native and non-native species reflect the novelty of changing environments and suggest increased resilience of ecosystems.

## 3. Is there a particular environmental policy reform you admire the most?

Yes! I admire the *Convention on Biological Diversity*, adopted in Rio de Janeiro in 1992. Here, humanity agreed for the first time on the protection and sustainable use of biodiversity – from genetic diversity to ecosystem diversity – as a common goal. Of course, implementation is slow, and more could always be achieved. However, the regular follow-up conferences bring progress, and, importantly, the issue is now firmly embedded in society.

## 4. Which trend in environmental policy and politics do you consider an aberration?

Maintaining land use subsidies based on, for example, cultivated agricultural area rather than on sustainable, biodiversity-friendly management.

## 5. Why environmental communication and campaigning?

The old proverb that you protect what you know is unfortunately becoming more relevant as a result of what has been called the “extinction of experience” – a generally silent facet of the global environmental crisis. Younger people have less direct experience of nature. This poses two risks: the loss of health benefits from interacting with nature, and a reduced willingness to

engage in biodiversity conservation. Environmental communication and campaigning are particularly promising when stimulating personal emotional experiences with nature.

## 6. What has your experience been when it comes to transferring scientific insights into practice?

Scientists are often judged based on their high-profile publications, which are usually of limited relevance to practice. More successful is the communicative exchange in the real world. Through my voluntary advisory work in Berlin, I've learned that scientific insights are more effectively conveyed to decision-makers or integrated into participatory processes when communicated in short and understandable terms and formats. This may sound simple, but we often underestimate that different groups speak different languages and may therefore easily talk past one another. We also need to differentiate between scientific facts and how we interpret them. Being mindful of the normative components of our arguments and aware of different values held by others expands the potential for shared solutions. And, of course, knowledge transfer isn't a one-way street: research can be inspired and refined through discourse with practice.

## 7. What field of research in the environmental sciences do you find most exciting?

The field of human-nature interactions intersects ecology, environmental psychology, and social sciences. Insights from this field reveal the importance of different facets of nature to people with diverse backgrounds, with the potential to better align environmental policies with people's needs.

## 8. Can you name any person or event that has had a particular influence on your commitment to environmental issues?

Yes, the first person was a biology teacher who encouraged his eleven-year-old students to collect plants outdoors during the summer holidays, identify them, and create a herbarium. That's how I began to delve into the world of biodiversity. About ten years later, Herbert Sukopp sparked my enthusiasm for urban ecology, particularly through field exercises on urban wastelands. Both impulses share the encouragement for direct experience of biodiversity in one's own environment – something worth reinforcing in both school and university curricula.

## 9. What knowledge about the environment would you like to pass on to young people?

I understand that many wish to preserve the environment as it is or as it once was. This is, of course, an important goal. However, it can sometimes be unrealistic due to past and partic-

ularly future environmental changes. Therefore, I advocate for combining two strategies: protecting and restoring natural and cultural landscape remnants wherever possible, while also being open to dynamic ecosystem processes and the benefits that can arise from emerging novel ecosystems or other nature-based solutions beyond historical baselines.

**10. As a person concerned with environmental and especially climate communication, what contradictions do you face in everyday life?**

I rarely drive in the city, but I do have a car for traveling to my second home in the countryside. Unfortunately, it is not possible to manage without a car there.

**11. What are you reading at the moment?**

Your questions 😊. Otherwise, I keep revisiting Christian Ludwig Krause's magnum opus *Fünfundzwanzigjährig-Erfahrungsmäßiger Unterricht von der Gärtnerey* from 1773. This book discusses how gardening and agriculture can be advanced through experience and new scientific insights. What truly fascinates me is how comprehensively Krause integrated various land-use systems to address pressing environmental issues, including the over-exploitation and destruction of forests, wind erosion leading to sand dune formation and disruption of agricultural practices, and the decline of bees due to the lack of flowers in overgrazed landscapes. With his ideas, Krause is a pioneer of nature-based solutions and points the way towards sustainable land use. Biodiversity conservation was not a concern back then. So, we have indeed made progress ...

**12. Apart from the ones we've raised here, what is the most important question of our day?**

The persistent question of war and peace.



**Ingo Kowarik,**

urban ecologist with a passion for integrating biodiversity into cities as socio-ecological systems. Studies in landscape planning, doctoral thesis, and habilitation at Technical University (TU) Berlin, DE. 1992 to 1999 professor of applied plant ecology at the University of Hannover, DE, and of ecosystem science and plant ecology at TU Berlin (1999 to 2021). 2001

to 2021 Honorable State Commissioner for Nature Conservation and Land Management, Berlin. Co-founder, president, and honorary president of *Neobiota*, the European Group on Biological Invasions.

**Awards (selected):** 2022 *International Carlo Scarpa Prize for Gardens* (with others).

**Publications (selected):** *Biologische Invasionen: Neophyten und Neozoen in Mitteleuropa* (2003, 2<sup>nd</sup> edition 2010) | Novel urban ecosystems, biodiversity and conservation (*Environmental Pollution* 2011) | Urban wilderness: Supply, demand, and access (*Urban Forestry and Urban Greening* 2018) | Beyond green: Bro ad support for biodiversity in multicultural European cities (*Global Environmental Change* 2018; with others) | Urban biodiversity, ecosystems and the city: Insights from 50 years of the Berlin School of urban ecology (*Landscape and Urban Planning* 2023) | Global disparities in urban green space use during the COVID-19 pandemic (*Nature Cities* 2024; with others).

© 2024 by the author; licensee oekom. This article is licensed under a Creative Commons Attribution 4.0 International License (CC BY).  
<https://doi.org/10.14512/gaia.33.1.2>

**INGO KOWARIK ...**

... is full professor em. for Ecosystem Science and Plant Ecology at Technical University Berlin, and long-standing coordinator, president and honorary president of the European Group on Biological Invasions. As the author of numerous groundbreaking publications, he has contributed significantly to developing our understanding of the urban environment and the interaction between humans and nature – with important consequences for the planning and design of cities. His work on neobiota has changed our view of this topic.

I have known Ingo Kowarik since 1992 when he became my colleague at the University of Hannover. I've grown close to him as a friend, admiring his intellectual vibrancy, eloquence and creativity, which captivates everyone. Engaging with him in discussions and reading his work is a joy. His unique blend of brilliance, humility, humor, and exceptional listening skills, along with his profound expertise, makes him an outstanding and wonderful colleague, scientist, teacher, and friend.

Ingo's theoretical work on naturalness concepts and hemeroby, potential natural vegetation, wilderness and novel urban ecosystems had a great impact on me and many colleagues in the early 1990s. Introducing the revolutionary idea that there is no (longer) *the* nature but different natures, he significantly influenced green space design in cities and nature conservation. His categorization of urban nature into 1. remnants of the original natural landscape; 2. stands of culti-

*His work on neobiota has changed our view of this topic.*

vated agricultural landscape; 3. horticulturally designed nature and 4. specifically urban-industrial nature highlighted his practical, scientific, and – for the time – unusually non-ideological approach. Ingo was able to credibly represent a new understanding of nature conservation by effectively merging biodiversity preservation with an openness to adapting to environmental changes. This concerns, for example, new types of biocoenoses in urban habitats or the differentiated management of non-native species (neobiota). A particularly noteworthy output of his scientific work on biological invasions, urban biodiversity patterns and dispersal processes in urban habitats is the reference book on biological invasions, neophytes and neozoa in Central Europe (2003).

Ingo's contributions extend to practical conservation efforts, like his participation in the design of the award-winning Natur-Park Südgelände in Berlin, and volunteer roles, including as the Berlin State Commissioner for Nature Conservation and Landscape Planning.

His recent work explores amongst others the impact of nature on human health, contribution to studies on eco-system services in the city (e.g., German TEEB study 2017) and dog walkers' views of urban biodiversity (with Leonie Fischer 2020), demonstrating his originality and continuous innovation in scientific research.

All this makes Ingo Kowarik the type of thinker, committed individual, friend, and *Mensch* that is sorely needed in these times of crisis and urgent action.

*Prof. Dr. rer. hort. Christina von Haaren*, full professor of landscape planning and nature conservation, Leibniz University Hannover, DE