

# Shifting Transitional Zones

## “Using the past as a compass for a nature-inclusive future”

In transitional landscapes, nature, agriculture and culture intersect; people and animals, land and water, local residents and national organizations meet. These areas are characterized by shifting boundaries and porous borders. They are places where different stakeholders, legal systems, and interests overlap and/or collide. Depending on changing goals and priorities, policymakers and planners have approached transitional zones from various angles for centuries. These are regions that have always been in flux—think of riparian areas along streams and rivers, transition zones between farmland and natural areas, or landscape elements such as hedgerows and drainage ditches.

Shifting transitional landscapes (Verschuivende overganggebieden) are the focus of a project proposal by the 4TU History Centre (Wageningen, Delft, Eindhoven and Twente), together with Peel Positief, Ecodorp Boekel, Vereniging Noorden Duurzaam, the Netherlands Open Air Museum, the Delft University Botanical Garden, and 4TU Resilience Engineering. By analyzing and recreating how transitional landscapes have evolved and continue to evolve we may have the tools for transitioning our current system to a more nature-inclusive system that is resilient against future disruptions such as climate change and sea-level rise. This project is aimed at making visible the choices that have been made historically and the path

dependencies that followed in landscape development and use.

## Transitions to a Sustainable Society

The transition toward a sustainable society has increased attention for restoring and strengthening ecosystems and for renewing the relationship between humans and their environment. We aim to combine knowledge of long-term historical developments with local insights into how people have shaped their interactions with the natural environment in the past.

History helps us understand how processes of societal change took shape, why practices shifted, and how particular types of flora and fauna flourished, intentionally (i.e. the introduction of cash crops, production forests, etc.) or unintentionally (i.e. flora and fauna that profited from human action). This historical knowledge is combined with the practical experiences of societal partners and broader audiences. We aim to translate this knowledge into pilot projects that strengthen the adaptive capacity of transitional landscapes.

We will share results with education, policymakers, and the broader public. Knowledge and practices from the past can support sustainable approaches to agriculture, nature management, and spatial planning. Local knowledge and broad cooperation are crucial for a sustainable future. Only by bringing together different perspectives—and by respecting the resilience of local communities—can we create diverse and sustainable living environments supported by local societies.

## The Past as Inspiration for the Future

*Shifting Transitional Zones* approaches the creation of a more nature-inclusive future as a process of co-creation, in which historical collections, historical knowledge, practical experience, and visions of nature-inclusive futures play a central role. The past serves as a source of inspiration for future developments. History acts as a knowledge reservoir for contemporary decisions. It helps us analyze historical decision-making processes and their social and ecological consequences, as well as the actors and factors that shaped them. In doing so, we support today's transitions and the integration of new ecological practices.

We bring together a wide range of knowledge and experience. Historians and transition scholars at the technical universities have extensive expertise in analyzing and shaping change processes in the fields of energy, water, food and other societal domains. Local knowledge and experience comes from partners working on strengthening transition capacity in De Peel, Twente and in the northern Dutch provinces. Expertise on traditional crops comes from the participating botanical gardens and museums. 4TU Resilience Engineering supports sustainability propositions with quantitatively substantiated dashboards. In *Shifting Transitional Zones*, these experiences are applied in co-creation processes that reinforce nature-inclusive initiatives grounded in local and historical knowledge and practices.

## Research ↔ Interaction ↔ Impact

Nature-inclusivity involves mitigating the boundaries between “nature” and “culture,” between human activity and the environment. It moves toward an inclusive ecological perspective in which humans are

one among many actors—toward a worldview in which human activity is less dominant and non-human actors receive more attention.

How and where we can shape such an approach in a human-made landscape like the Netherlands is a complex challenge. Through history and historical experiences, we aim to explore potential pathways and stimulate societal discussions. Interaction is essential: with different audiences and at different locations. To make the broad palette of choices visible, we begin with concrete places, historical collections, and location-based experiences.

### Conceptual Framework

A successful transition begins with identifying historical experiences and knowledge so they can inform new practices focused on restoring ecological balance. Our conceptual framework draws on research into (technological) transitions. Socio-technical systems evolve under the influence of new knowledge and technologies. Numerous actors shape routines, cultural norms, and formal and informal rules, which become embedded in institutions and practices. External pressures—such as climate change, conflicts or societal crises—destabilize existing systems, creating space for alternative ideas and for reshaping those systems.

### History Field Labs

*Shifting Transitional Zones* will establish several physical **History Field Labs**—places where historical knowledge, past practices and local memories are brought together and transformed through co-production into concrete projects, interventions, and products in which experiencing and developing nature-inclusivity is central.

The first step—gathering historical knowledge—takes place in collaboration with museums, landscape managers, archives, and local historical societies. Through heritage institutions, communities and land users, historical landscapes, practices and memories are mapped. In the Field Labs, this knowledge is shared and enriched with public recollections and experiences. From this, new nature-inclusive approaches will be developed—approaches that respect history and reflect the diversity of contemporary debates.

We emphasize the historical development of transitional landscapes. Areas where systems meet (wet–dry, high–low, nature–culture) are particularly interesting for their rich biodiversity. Transitional zones near Natura 2000 sites offer opportunities for new experiments in sustainable agriculture, recreation and climate adaptation. Studying the history of these areas—and how their boundaries have shifted—provides insights for current transitions and the potential for landscape reconstruction. Examples include new and traditional uses of riparian zones, wetlands, embankments, communal lands, regional products, traditional crops, and historical processing methods.

### Co-Production of Knowledge

The second step is the co-production of knowledge. Historical insights, experiences, and expectations regarding nature-inclusive futures come together here. Beyond the History Field Labs, this involves environmental education sites, local communities, and landscape and ecology professionals.

Alongside knowledge exchange and making choices for nature-inclusive futures visible, the project aims to develop **change agents** in nature-inclusivity—actors

who can influence landscape and ecological development at multiple levels.

The findings will be translated into concrete outputs for diverse audiences, such as:

- Experiencing history in landscapes, museums and local communities or businesses
- Education and training—from primary schools to post-academic programs (e.g., WUR, RWS Academy)
- Podcasts co-produced with local experts and the general public
- Public discussion events with societal stakeholders
- Policy briefs for organizations such as Rijkswaterstaat, provinces and municipalities

### Pilot Projects

*Shifting Transitional Zones* focuses on transitional zones across the Netherlands, including pilot projects such as:

- (Former) peatlands of **De Peel** in Brabant and Limburg
- Transitional landscapes in **Northern Netherlands**
- **Marke** communal lands in Overijssel
- Riparian zones along rivers (in collaboration with Rijkswaterstaat)
- Botanical collections of the **Netherlands Open Air Museum** (historic agricultural crops) and the **Delft University Botanical Garden** (historic “industrial” plants & climate resistance)

