



# ANET 2023

## RESILIENCE, RECOVERY AND RESTORATION: TRANSPORT ECOLOGY IN A CHANGING WORLD

### INTERNATIONAL CONFERENCE OF THE AUSTRALASIAN NETWORK FOR ECOLOGY AND TRANSPORTATION (ANET)

27 - 29 NOVEMBER 2023 | TE PAE, CHRISTCHURCH, NZ



Linear infrastructure and transportation networks – roads, railways, transmission lines, and pipelines – are integral to local economies and community health and well-being. While their construction, maintenance and operation can impact biodiversity and ecosystems in numerous ways, linear infrastructure corridors can also provide important ecological functions.

Both linear infrastructure and biodiversity are vulnerable to natural disasters and extreme weather events, which are predicted to increase in frequency and intensity in the years ahead. Impacts on natural ecosystems can be further exacerbated by emergency works after disasters, such as earthworks, drainage and vegetation clearing. Importantly, many of these impacts can be avoided or mitigated by enhancing landscape connectivity, reducing wildlife-vehicle collisions, and minimising artificial light at night, among other measures.

Healthy and resilient ecosystems also play a vital role in disaster risk reduction and natural (or 'green') infrastructure can help provide communities and nature with resilience to these hazards. Conversely, poorly located and designed transport infrastructure can exacerbate ecological consequences and cost billions to repair or rebuild following natural disasters. The transport infrastructure we plan, design and build today must both support and promote resilient and functioning ecosystems, and ensure that it can withstand and recover from future shocks.

#### Important questions to be discussed at ANET 2023 include:

- How do linear infrastructure and transport networks affect the resilience of natural ecosystems to future shocks and stressors?
- How can existing and future infrastructure support and enhance ecosystem health and biodiversity conservation?
- How can transport planning, design, construction and operation assist in the recovery and restoration of endangered species, populations and ecosystems after natural disasters?
- What role does the community play in the planning and design of ecologically-sensitive linear infrastructure, as well as restoration and recovery after shocks and disasters?

To be held in the Christchurch Conference Centre in November 2023, ANET is the premier event for ecologists, transport planners, regulators, construction and operation professionals, and the local community to

engage on the interactions between transportation and ecology. The conference will include two days of presentations, posters, panels, workshops and trade displays, and a one-day field trip to Kaikoura.

#### Kaikoura Field trip

In November 2016, a 7.8 magnitude earthquake occurred 15 kilometres off New Zealand's north Canterbury coast. Kaikoura, with diverse ecosystems rich in indigenous biodiversity, was severely impacted. The level of damage to the road and rail network in the region was unprecedented in New Zealand. The scale of the event and need for quick restoration balanced with minimising the impact on the environment, wildlife and landscape created a great challenge for the recovery project.

#### The massive recovery and rebuild of the highway and railway included:

- 9,000 people working more than 6.5 million hours
- The handling and movement of 16,000 seals, 150 lizards and 5,500 fish
- Installation of dozens of temporary and permanent culverts and bridge underpasses for fish passage
- Installation of low-emission lighting and monitoring to protect biodiversity and support the Dark Sky Reserve in Kaikoura
- Propagation and planting of the Ohau Rock Daisy, which was nearly wiped out by landslips (<100 plants left in the wild)
- An extensive community engagement program, including the co-design of cultural and ecological interpretation along the rebuilt highway

#### EARLY BIRD REGISTRATION FEES

EIANZ members	\$750 AUD
EIANZ student members	\$180 AUD
Non-members	\$990 AUD

**DATES:** 27 - 29 November 2023  
**VENUE:** Te Pae Christchurch Convention Centre,  
188 Oxford Terrace, Christchurch