

15

LIFE ON LAND



2020-2024
Publications

34



2020-2024
Percentage of all
Taiwan Publications

1.9%



Course Units

51



Student Engagement
with Units on SDG 15

773

Research

Urban Forests and Climate Resilience

Professor Chun-Cheng Lin from the Department of Industrial Engineering and Management analyzed potential issues such as tree branch loss risk, maintenance costs, and disaster damage, and proposed policy recommendations to enhance the climate resilience of urban green spaces. The study balances the environmental benefits of urban forests with human risk management, and informs smarter green space governance. The findings were published in the journal, Urban Climate.

Experiential Learning for Terrestrial Biodiversity

The campus serves as a living lab in the course “From Shennong Slope to ESG: University Social Responsibility and Environmental Education.” Indoor sessions trace the historical transformation of local environments and use campus tree health checks and carbon stock audits to reveal ecological indicators. Field walks guide participants to observe on-site biodiversity and conduct basic monitoring, integrating history, species observation, and carbon accounting to promote terrestrial conservation and sustainable stewardship.

Social Impact

Hsinchu Xiangshan Wetland Eco Walk

The Service-Learning Center organized an eco-walk at Xiangshan Wetland, led by Professor Hsiao-Yun Chang (Asia University). Students learned about the endemic Taiwan fiddler crab and engaged in hands-on habitat stewardship by removing invasive halophytes (e.g., sea purslane and salt-tolerant grasses). In partnership with Hsinchu City's ecological conservation volunteers, the group concluded with a visit to the wetland boardwalk, deepening their understanding of biodiversity, habitat protection, and civic participation.

From Wartime Industrial Site to Wildlife Habitat

The NYCU “Sixth Fuel Factory” team and picture-book artists published *The Big Chimney of Hsinchu Sixth Fuel Factory* (June 2024) to share the history of one of Taiwan’s few surviving WWII industrial sites. Narrated from the “big chimney’s” perspective, the book follows its journey from construction and operation under Japanese rule, through postwar life as a military-dependent settlement, to today’s restoration as a roost for protected bat species. The project weaves together heritage, community, and ecological conservation.





Education & Cultivation

Mountain Education and Leave No Trace

Co-organized with the Mountaineering Club, the annual “Yangmingshan Grand Traverse” turns the mountains into a classroom, blending nature education, physical challenges, and environmental ethics. In its sixth year, the event attracted 174 participants. Student leaders are trained in mountain skills, risk assessment, and team leadership while promoting the Leave No Trace principle. Participants build fitness, environmental mindfulness, teamwork, and self-awareness through respectful and low-impact practice.



Wetland Education and Sustainable Stewardship

A general-education lecture, “Wetland Education, Transmission, and Sustainability—The Huajiang Wetland Alliance,” featured Dr. Yi-Bin Fan (Forestry Research Institute, Ministry of Agriculture; former chair of the Alliance). The talk underscored the need to protect migratory birds, fish, and wetland flora; mitigate development pressures; and scale conservation through education and community engagement to cultivate public consensus on biodiversity and habitat sustainability in the region.





Stewardship

Campus Tree Governance and Greening

NYCU institutionalizes tree risk management and full-lifecycle care. An outreach session on “Campus Tree Risk Management and Mitigation” invited ISA-certified arborists to demonstrate instrumented inspections and explain safety assessments and risk reduction strategies. A companion talk on campus greening covered soil and tree health, pruning principles, and pest prevention. With graded inspections, preventive care, and restoration, the program reduces failure and disease risks and enhances canopy quality, biodiversity, and site resilience.

Wetland Education and Sustainable Stewardship

To advance wetland conservation and civic participation, the Community & Peer Education Center hosted “River Without a Mouth: What the Zhiben Wetland Remembers,” where author Han-Yau Huang unpacked the entanglements of ecology, local culture, and development. A “Wanli Wetland Habitat Care Day” followed, led by experts from the Society of Wilderness, combining field surveys with maintenance practices. The series links knowledge translation with action, strengthening biodiversity resilience across campuses and communities.