
2024
Annual
Report
荒野
水鳥出沒請注意!
水鳥護生圍籬設置



2024 Contents

Letter from our Chairman

3 Celebrating the 30th Anniversary, Building the Century-old Heritage

Introduction

4 Introduction of SOW

Summary of Results

6 SOW's Achievement and Outlook

Initiative

7 SOW's Advocacies Gentle but Determined

Habitat Protection

14 Habitat Stewardship and Restoration – Expecting SOW 30-year Anniversary

15 Annual Results of Habitat Protection

Environmental Education

23 Celebrating its 29th Anniversary, SOW Continuously Growing and Thriving on Environmental Education

24 2024Environmental Education Achievements

SOW Nature Center

30 Alternative SOW Nature Center

31 SOW Nature Center in 2024

Finance and Resource Allocation

36 Meeting the Turning Point of Resource and Challenges

Corporate Cooperation and Social Responsibility

37 Corporate Sponsorship and Cooperation Projects

38 Collaborating with SOW to Transform Sustainability

Celebrating the 30th Anniversary, Building the Century-old Heritage

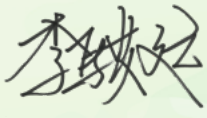
Whenever we talk about the three major appeals of the Society of Wilderness (Hereinafter referred to as “SOW”), namely "sustainable forests, plastic-free oceans, and ecological cities", fellows often joke that SOW intends to protect almost the entire earth except for outer space! Although it is an exaggerated statement, it accurately reflects the inclusive and open nature of SOW, which positions the association as a stage for all volunteers to realize their visions. It is precisely because of this premise that SOW has been able to complete a considerable number of promotional activities and environmental protection projects year after year. Thanks to the enthusiastic volunteers and the hardworking staff as well as to both public and private sectors for their trust and support for SOW.

SOW’s three main focuses are "environmental education, habitat protection, and advocacy participation". Environmental education is the foothold of SOW, with the longest history of development, the most comprehensive system, and the largest number of volunteers.. This year, in addition to the regular work, many innovative programs are also being introduced. For example, the Interpretive Education Committee integrates elements of natural ecology, mental health, adventure therapy etc., to launch “Eco-Spiritual Healing Farm” and “Green Care Program”; the Children's Education Committee introduces the "Earth Keepers" camp lesson plan from the Institute of Earth Education in the US. Above all are all new attempts to inject vitality into the association; habitat protection is one of the primary purposes of SOW, and everything we do is to achieve the goal. There are 85 habitats of concern by SOW currently, they are protected by habitat volunteers from 11 chapters across the country, in different ways but with the same vision. In addition to successfully acquiring SOW Land No. 3 in 2024, the Research and Development Committee is focusing on research and planning of agricultural rights, which will soon conclude and support the acquisition of SOW Land No. 4.

Thanks to the efforts of all volunteers and staff, SOW is moving steadily towards its visions, and we always keep in mind the public trust and expectations on SOW. When there are environmental issues that need SOW to step up, we will not stay out of it. Through collaborating with enterprises, schools and other parties, we have completed several survey projects of river waste and marine waste. By disclosing the data, we can collaborate with public sectors to promote policies of circular economy and zero waste. On the issue of climate change that everyone is concerned about, on top of promotional activities, the Climate Change Commission has also completed the set up of several community-based citizen power plants. In the future, we will continue to promote the project in remote communities with difficulties to find resources.

The examples given above are far less than the efforts made by our fellows. Thanks to your dedication and support, SOW is able to achieve these proud results. In 2025, we are going to celebrate our 30th anniversary, and cordially invite everyone to join us and become a part of the century-old heritage of SOW together.

Chairman




KEEP ON RUNNING

Introduction of SOW

Society of Wilderness (SOW) was founded on June 25, 1995 with the purpose of conserving Taiwan's natural ecology and environment through education and habitat protection. Headquartered in Taipei, we have eleven chapters across Taiwan, one chapter preparatory office, four liaison offices, five SOW partners overseas, and more than 20,000 current civilian members who are committed to environmental protection.

Purpose of SOW

SOW acquires legal guardianship and management rights of waste lands through purchases, leases, commissions or donations, with the intent of protecting habitats and letting Mother Nature repair damaged lands while restoring the vitality within them. By doing so, future generations will have the opportunity to explore the mystery of nature as well as the meaning of life.

Mission of SOW

★ Preserve natural species in Taiwan.
★ Allow natural succession in the wilderness.
★ Promote ecological conservation.
★ Provide opportunities of ecological education for the public.
★ Assist the government with water/soil preservation and natural resources protection.
★ Develop talent in ecological conservation.

Committees and Task Forces

☆ Interpreter Education Committee
☆ Promotion Education Committee
☆ Family Education Committee
☆ Children's Education Committee
☆ Habitat Work Committee
☆ Research & Development Committee
☆ International Affairs Committee
☆ Local Care and Guardian Committee
☆ Climate Change Education Committee
☆ Green Life Map Development Task Force
☆ Special Education Task Force
☆ Nature Center Development Task Force
☆ Aboriginal Task Force

SOW's Achievement and Outlook

SOW adheres to the concept, "habitat protection and environmental education complement each other" to continuously promote environmental protection. In recent years, donations from 7-ELEVEN's "Rediscover Love" charity fundraising platform have not only supported our projects, but also tested our project management capabilities.

SOW has never paused on safeguarding biodiversity, ranging from protecting leopard cats in Fazi River, thinning mangroves on the south bank of Zhuoshui River, and building waterbird protection fences. In addition, through marine and river waste monitoring, coastal cleanup activities and "zero waste" initiatives, we have come to realize that reducing the use of disposable items is the fundamental way to tackle the marine waste problem. Environmental education also plays a key role. The public welfare fundraising projects in 2024 were mainly in support of programs of "environmental education, habitat protection, and social care", and actively exerted influence through the concept "habitat protection, civic education, and social common good." Exciting results include the planned purchase of forestry land in Hengshan Township of Hsinchu County (SOW Land No. 4), cooperation with the Taichung Association of Living Essence to promote the "Lychee Forest Resilience Project", and the "Borneo and Us" special exhibition held at the Taichung Science Museum. On July 5, the "Miaoli Shitan Bajiao Forest" was officially handed over as SOW Land No. 3 which is a perfect example of members' wishes for legacy donations and bamboo bank fundraising. Currently, the fellows based in Taichung and SOW Habitat Conservation Department are conducting field trips and surveys in order to provide comprehensive protection to this forest land.

"More resources comes greater responsibility." Starting from 2025, SOW will no longer cooperate with the 7-ELEVEN charity fundraising platform, but the missions of protecting habitats and promoting environmental education will not stop. The project management model introduced in 2022 will be continuously applied to all external cooperation projects. We also hope to expand influence through collaboration with various partners. 2025 marks the 30th anniversary of the establishment of SOW, and a series of activities will be held, including:

February 15: "Thirty-year Love Poems, Arts and Culture Feast" performed at the Nanhai Theater of the National Taiwan Arts Education Center.

March 22-23: "Green Living, Sustainable Development" Parent-child camping held simultaneously in North, Central and South Taiwan

May 24: Member representative election, laying the foundation for future development

June 28: The SOW 30th Anniversary Conference and handover ceremony held in Taipei.

In the second half of the year, we plan to hold the "Run for SOW" race and invite people who care about the environment to participate.

Looking back, SOW fellows have always stayed true to the original aspirations and taken action to protect the environment. Looking into the future, SOW will continue to strive on habitat protection and environmental education, and invite more people to join this sustainable journey to create a better future together!

SOW's Advocacies Gentle but Determined

SOW is made up of a group of people who are passionate about the environment and nature. Environmental education programs and habitat works are conducted by a diverse group of volunteers with the hope that through "environmental education," to encourage more people to get familiar with nature close to them, and then appreciate and work together to protect Taiwan's natural environment.

When facing "major environmental issues" rooted from policies or social development, except for a small group of people, most SOW volunteers don't have legal backgrounds or expertise in issue advocacy. Therefore, SOW's involvement and exposition in "environmental issues" are naturally not as intensive as those of other professional organizations. However, even with a lack of related background and long-term engagement, SOW can still make contributions on addressing environmental issues and facilitate policy changes through its organizational efforts.

Staff and volunteer groups with professional backgrounds put forward practical suggestions and countermeasures through long-term engagement and data collection, then present problems and solutions pertinently and start dialogues with the authority and the public, so that environmental problems can be fully discussed, improved, and unnecessary confrontation, development or projects can be avoided. On the other hand, SOW staff continually encourage volunteers, the public and private sectors to participate in various "citizen scientist" activities to help collect data, images, and then make them public through media exposures to unveil environmental problems and issues, inviting the public and private sectors to face and improve them together.

Each NGO has its unique culture and specialties. Aside from leading its own initiative and speaking out, SOW also gives support to major issues advocated by allied NGOs after reaching a consensus internally. Such "alliance" is like different defensive positions in baseball, every position is indispensable. Even SOW doesn't play a key role in the game, however it can exert influence on other matters from different positions.



Let's Learn about The National Spatial Plan and Make Life Better

The "National Spatial Plan" officially implemented in May 2025 is a law enacted to integrate long-standing problems such as flaws of Taiwan land law and loose spatial planning system, and to address climate change and pursue national sustainability. The purpose is to systematically synergize the existing independent spatial plans such as urban plans, regional plans and national park plans. The National Spatial Plan is divided into four major zones, which are then further divided into 19 different categories, with more specific regulations and restrictions formulated for each category.

1. National conservation zone: used for conservation and security purposes (such as national parks).
2. Marine resource zone: for the purpose of sustainable resource utilization (such as marine protected areas).
3. Agricultural development zone: used to ensure food security (such as farmland).
4. Urban and rural development zone: used for intensive development and growth management (such as urban planning areas).

The National Spatial Plan Act is related to the tension between environmental protection and the economy of the land we live on. How to strike a balance is an important issue for the future.





River Waste Rapid Screening – Reclaiming Plastic-Free Rivers

The 2024 "River Waste Rapid Screening Survey" project includes ongoing inspections of Yunlin Beigang River, Taichung Wu River, and the Tamsui River in Greater Taipei. This year's survey was completed by more than 150 volunteers and partners from Fubon Life Insurance, Ming-Chi University of Science and Technology, Shih Chien University, and the New Taipei City Water Patrol Team. The 226.5-kilometre long field trip along Beigang River discovered more than 920,000 litres of waste and the pollution level of the riverbank is D (dirty and messy). There are numerous plastic bags filled with garbage and large construction waste and signs of burning at the junction of Huwei River and Yunlin River. The coastal section affected by the mangrove terrain becomes the most serious spot, with E pollution level (extremely dirty). In addition, due to the prevalence of local aquaculture, fishery-related waste accounts for as much as 50%.

However, a revisit of Wu River found that the total amount of garbage had decreased by 40% compared with three years ago. The amount of garbage on the right bank of Wu River has dropped from 1,670.2 bags to 67.4 bags per kilometer, a reduction of more than 90%. However, in 2024, the hotspots moved to the middle and upper reaches, with large amounts of bagged garbage, large furniture and construction

waste spread along remote river channels. The main types of garbage are plastic bags, bottles, cans and tableware, indicating that the public still needs to make more efforts to reduce waste at the source.

After the hotspots of Tamsui River were announced in 2023, the riverbank garbage clean-up rate was as high as 58.3%. The 2024 survey team inspected more tributaries and pinpointed the left bank of Xindian River and Da'e River as hotspots, with disposable food plastic waste accounting for 60%. Relevant policies and regulations have become the key to improving river waste pollution. In order to educate the public about the river waste survey, the theme song "Blue Planet" was launched in 2024, through the cheerful lyrics and music, it's hoping to increase public awareness to the problem of waste in the environment.



Ocean Cleanup Action to Recuperate the Ocean

In 2024, a diving trial run was carried out at Longdong No. 1.5 diving site, and a formal ocean diving cleanup activity was held at Longdong No. 2 diving site. A total of 953 kilograms of waste was collected from the two activities. SOW is one of the few organizations to mobilize free divers and scuba divers to rid the ocean waste. Free divers are deployed at the coastal areas within 10 meters, while scuba divers are responsible for deeper waters. In 2024, Taiwan Canoe Promotion Association sponsored canoes to support the action. Each canoe works as a



floating station to pick up garbage from divers when they return to the surface, so the divers don't have to swim back and forth to the shore, saving time and energy. The canoes also serve as an extra layer of safety protection for voluntary divers.

Safety of participants is the top priority of SOW when carrying out environmental actions. Ocean cleanup is relatively risky, indoor training is mandatory for volunteers in the early stage to convey the safety measures of ocean cleanup, the use of tools, knowledge of marine ecology, etc., and a dive test training is also conducted to test the skills of each participant under the guidance of coaches and experienced ocean cleanup divers.

Special thanks to Porsche Taiwan for its generous support. With the seamless collaboration of scuba divers, free divers and team members on the canoes and shores, the ocean can finally take a break to recuperate.





ICC Coastal Cleanup and Statistics

The "Love Sea Travel" website continues to compile coastal cleanup data, and analyze the statistics based on the types of marine debris listed by the International Coastal Cleanup (ICC). A total of 437 batches of coastal cleanup data were submitted in 2024, with a total of 19,167 participants whose work covered 94,382 meters of coastline and removed a total of 43,268.3 kilograms of garbage. As the pandemic eased, the scale of coastal cleanup activities has maintained, but the amount of coastal waste has dropped significantly, indicating that the public's awareness of environmental protection has increased.

According to the ICC statistics this year, the top three waste items are "PET bottles, plastic bottle caps, and cigarette butts"; the total amount of the top ten waste items accounts for 78.5%. In terms of material type, plastic waste accounts for about 87.4%, of which about 74.8% is related to food. Coastal cleanup alone cannot solve the problem of marine debris, the ultimate solution is to change our lifestyle by reducing the use of disposable items.

The data from 437 batches of coastal cleanups in 2024 showed that two sections of Taiwan's coastline are defined as the most dangerous areas (Level E), respectively located in Changhua County and Hsinchu City. The most dangerous section is located in Fangyuan, Changhua County (mangroves, wetlands, and intertidal zones), where an average of 146 pieces of hazardous waste (mostly iron and aluminum cans and glass bottles) are found every 10 meters. When getting close to the ocean, people should be aware of hidden dangers on the beach, and more importantly, to face the problem of marine waste and to restore the beauty of the ocean.







Citizen Power Plant – Green Energy Generation for Everyone

The concept of citizen power plant comes from a group of people who share the common values, set up an organization, collectively invest, install renewable energy power generation equipment, and jointly participate in the operation, decision-making, revenue generation, public affairs as well as public welfare feedback of the power plant, so as to achieve the visions - "implementing citizen participation", "cohesion of local consciousness" and "practicing social welfare". In 2024, SOW completed a public welfare dual green energy power generation system combining solar energy and micro-hydropower in Chuying Mountain of Hualien County, to realize the autonomy of community power microgrids. At the same time, it continues to support the "Pingtung County Taimu Mountain Citizen Green Energy Technology Production Cooperative" initiated by community residents to raise funds for community site planning and construction. In addition to hosting "Citizen Power Plant Workshops" in 20 communities across the country, SOW also conducted "Green Energy DIY" solar energy installation workshops in 10 revitalized community bases and environmental education venues, allowing the public to learn from the assembly process of the system, and to promote the use of green energy in daily life.

Zero Waste – the Importance of Source Reduction

SOW continues to address waste issues in Taiwan and actively advocates the vision of "zero waste". We held a press conference with groups concerned about waste issues to review the effectiveness of current policy implementation and future policy directions. The initiatives this year include: demanding the government to regulate all PFAS chemicals, facilitating the Resource Recycling Promotion Act, calling for an increase in rates for flat packaging materials to encourage recycling, and pleading the Ministry of Health and Welfare to encourage people to buy toiletries with fill-your-own bottles; and reviewing Taiwan's excessive waste problem as well as its over-reliance on incineration and landfill for garbage disposal. The government should stop building more incinerators and invest in a circular economy instead, such as promoting rental systems, product repairs, and material standardization, as well as establishing



an extended producer responsibility system to reduce waste generation at the source. In addition to monitoring the government, volunteers also work hard to encourage the public to convert the habit of over-reliance on disposable products. There are nearly 2,000 families participating in the SOW parent-child group activities every year and the theme of the group in 2024 "Green Circular and Sustainable Living", is to practice zero waste in daily life and instill the habit of bringing your own lunch boxes and shopping bags to children at an early age. Meanwhile, the "Circular Zero Waste Promotion Volunteer training" initiated by the Taipei chapter took place in the Chiayi chapter for the first time in 2024. These efforts reach nearly 3,000 people each year, hoping they will start to pay attention to waste issues, and then implement source reduction in daily life and work together to achieve the goal of zero waste.



Climate Change Adaptation Projects

In addition to constantly promoting various actions to reduce greenhouse gas emissions, "adaptation" is another key strategy to cope with the changed climate state as well as the challenges in the future. In 2024, SOW and the Changhua County Environmental Protection Bureau cooperated to implement a "Community-based Climate Change Adaptation" plan for five communities in the county. Through the initial briefing and the workshops of climate change adaptation and vulnerability in each community, the residents were led to think about the potential impacts and hazards of climate change in their communities, and then to propose contingency strategies and action plans through discussions in the workshop to promote bottom-up climate governance and capacity building. Although the scale of community definition in Taiwan is very different from other countries, this project can amplify the influence by promoting community awareness of climate change adaptation and integrating resources. At the same time, we also did home energy conservation and health checks for 30 disadvantaged families in the community who have increased electricity consumption due to climate change, resulting in inflated electricity bills and electricity safety issues. Under the support of the public welfare fund, we are able to help to reduce the impact on vulnerable families in the community and prevent them from becoming victims of climate disasters.

2024 Earth Initiative – Safeguarding Biodiversity

The theme of 2024 Earth Initiative is "Return to Formosa - Biodiversity Protection Plan" which aims to educate the public about biodiversity through the implementation of various events. The key event "Earth Hour" in previous years has been successfully promoted and actively followed by various companies and units in Taiwan. Starting from 2024, SOW stopped hosting the one-hour lights-out event



and relaunched the previous initiative which is about energy-saving - "Lights out at the summer solstice" (2004 to 2009). Electricity consumption is bound to increase significantly during the summer solstice. In 2024, the Summer Solstice Lights-Out event was held in the form of a physical market featuring advocacy and promotion, sustainable shops, unplugged music performances, and lights-out moment. By participating in these activities, the public can easily learn about energy conservation issues and knowledge. "Lights out at the summer solstice" is part of the "Summer Power Saving Season" event which also features other activities including power saving lectures, online lucky draws, etc., helping the participants to learn new behaviors and methods to make a change. The Earth Initiative activities include nature guided tours, where SOW guides took the public to experience natural habitats in various regions; the City Nature Challenge, which was held simultaneously with the international event at the end of April, recording Taiwan's species in the simplest way and accumulating a domestic biodiversity database; a sustainability forum was



held in early May to share the perspectives of protecting biodiversity with a variety of topics. In the trend of increasing demands of ESG, corporate entities have to learn more about environmental issues, so SOW can explore more opportunities of cooperation in different aspects, and enhance public awareness of habitat protection. Earth Initiative uses a variety of approaches to work with all sectors to address biodiversity issues, hoping that all sectors take practical measures to raise the public attention to climate change, as well as concern for ecology and natural habitats.



Habitat Stewardship and Restoration – Expecting SOW 30-year Anniversary

SOW conveys and promotes its visions through conducting various environmental education programs and working holidays in each chapter, so that more people can get close to nature and be aware of the environmental issues. On the other hand, SOW also strives to obtain the stewardship of wasteland through "purchase, long-term lease, acceptance of commission or donation"and enclosure to allow nature to manage and thrive itself. In order to achieve the purpose, SOW constantly communicates through different channels and approaches. However, due to the high land prices in Taiwan and the restrictions of laws and regulations, the journey was full of difficulties.

SOW is well aware of the challenges of obtaining management and ownership rights of land. Therefore, it adopted a pragmatic approach which is setting up "fixed-spot teams" at locations with known ecological richness and conservation value adjacent to each chapter. Through long-term "fixed-spot observation", If any unexpected situations are observed, we can speak out and tackle it. Habitats where no fixed-spot teams available are also frequently visited and patrolled. To date, the number of areas of concern has reached 85. In terms of acquiring land management rights, SOW also customizes the maintenance and management strategies based on the characteristics of the land and different conservation needs.

Thanks to the trust of the public and various opportunities, SOW was able to purchase "SOW Land No. 1" in 2018 and "SOW Land No. 2" in 2022. As for "SOW Land No. 3", it was purchased in 2024 as a legacy gift from a member's family in central Taiwan. In 2019, a call from a member's family who expressed that they would donate their estate to SOW in accordance with the member's "last wish". With the leadership of the former chairman (Ms. Liu Yuemei) and with the consent of the standing committee members, SOW initiated a small fundraising internally and sent a gratitude letter to the family to explain the use of the estate as the principal for purchase fund, and to give priority to purchasing a piece of land in central Taiwan for enclosure. After a long process of site selections, on-site surveys and evaluations, we finally purchased 3 hectares of forest land in central Taiwan in July 2024.

Cases of accepting land from owners through entrustment, adoption, leasing or signing of "Memorandum of Cooperation" are occurring in various chapters. In addition to the interpretation activities, many "research and investigation projects" and "protection or restoration actions" are also being carried out on these lands that are of concern to SOW.

In 2024, SOW reached another important milestone - guarding Wugu Wetland for 2 decades. Over the past 20 years, SOW has been collaborating with High Riverbank Construction Management Office of New Taipei City, and Hydraulic Engineering Office of Taipei City, to protect the important wetlands in the Tamsui River basin.

We are not only preserving natural wonders and ecological resources for future generations, but also safeguarding Taiwan's "eco-biodiversity", thereby more people will take actions to pass on the legacy to future generations.

Annual Results of Habitat Protection

Project Type	Achievement
Land purchase and protection	• SOW's Land No. 1 - Yilan Dongshan • SOW's Land No. 3 - Miaoli Shitan Xiangyuanwo
Donation	• SOW's Land No. 2 - New Taipei Xizhi Dajian Mountain
Adoption and maintenance	• New Taipei-Wugu Wetland Ecological Park • Hsinchu Hengshan Dacidong Tianliaopo • Tainan Cigu Salt Wetland • Tainan Barclay Memorial Park • Kaohsiung Yuanchungkan Wetlands Park(East District)
Cooperative management	• Taipei Fuyang Natural Ecological Park • Taipei Yongchunpi Wetland Park • Taipei Youth Park
Entrusted management	• National Freeway 3A Fuyang Habitat • Hsinchu Hengshan Citrus Grove Friendly Farming Base • Kaohsiung Tianliao Protected Habitat • Yilan Sanshing Breeze Entrusted Land
Nature Center	• Wanli Wetland Education Center • Zhoumei Environmental Education Center • Shuiyun Ecological Education Center • Namaxia Utung Nature Classroom • New Taipei-Wugu Wetland Ecological Park • Shuanglianpi Environmental Education and Habitat protection Base • Qingshui Lake Environmental Education Base
Leased land conservation	• Hsinchu Yorotian Friendly Farming Base • Yilan 52-jia Wetland • Yilan Shuanglianpi
Research and Survey Project	• Kentish Plover Survey in Wazihwei Wetland, Taipei • Ecological Investigation and Close-to-Water Plan in the Shuangxi Area, Taipei • Zhoumei Environmental Education Program • Spartina alterniflora removal on Danshui River bank • Ecological investigation and close-to-water plan in Shuangxi area, New Taipei • Wugu Wetland Operation and Ecological Survey on water birds • Carnivorous plant Habitat Conservation Monitoring and Maintenance in Hsinchu Zhubei Lotus Temple Wetland • Hsinchu Sustainable Biodiversity Promotion • Hsinchu Dashanbei Amphibians protection Plan • Hsinchu Shallow Mountain Adobtion and protection Plan • Touqian River protection • Aquatic Ecology Survey of Xueshankeng Creek • Completion of the Children's Picture Book "Let's Go, Wild Tiger!" • Chiayi Invasive Species Management and Biodiversity Promotion • Artificial nest box building and monitoring Project(Tainan) • 2024 Shuanglianpi Nature Reserve Restoration • Yilan Wildlife protected area managing Plan • 52-Jia Wetland Conservation Project • Coastal Walking Expedition Project 2.0 • Carnivorous Plant Live Transplantation and Soil Seed Bank Monitoring Program • Taitung Taitung Estuarine Wetland Breeding and Conservation Plan • Taiwan River Checkup – Rapid Screening Survey of River Waste • Ocean Cleanup Action Program
Protection Actions and Others	• City Nature Challenge • Simultaneous Bird Survey in Danshui River Basin, Taipei • Protect Zhangixalus arvalis (Farmland tree frog) • Crab protection in Danshui River



Annual Results of Habitat Protection

SOW safeguarded 85 habitats across Taiwan in 2024. The following are worth noting in its habitat protection work:

1. Successfully acquired SOW land No. 3 located in Xiangyuanwo, Shitan Township, Miaoli County
2. Further collaborating with High Riverbank Construction Management Office of New Taipei City on the construction of bird watching platform on the large ecological pond in Wugu Wetland
3. Conducting 7 ecological patrolling trips of and 4 sessions of habitat volunteer advanced training at Daqidong, located in Hengshan Township of Hsinchu County, and held the first public nature experience event in July
4. Jointly publishing "Let's Go! Wild Tiger" picture book by Taichung Fazi River habitat team and the Taichung Branch of Forestry and Nature Conservation Agency
5. Signing a 5-year adoption contract with the Kaohsiung City Government of the east district of Yuanjhong Harbor Wetland to safeguard the breeding site of the largest number of pheasant- tailed Jacanas in Kaohsiung City.
6. The SOW interpretative team set up fixed observation spots at National Dong Hwa University Innovation and Research Park in Hualien, Shibi in Yunlin, the east district of Yuanjhong Harbor Wetland in Kaohsiung, and Utung Namaxia in Kaohsiung.
7. The City Nature Challenge has entered its 9th year. SOW has been hosting the program in Taiwan. During the 2024 City Nature Challenge, 1,960 participants contributed a total of 55,745 records covering more than 5,160 species, including at least 200 rare, endangered or threatened species. It's worth mentioning that the number of species recorded in the Chiayi-Yunlin region ranks 15th in the world!
8. Up to date, more than 10,000 participants have investigated 76 habitats of concern by SOW and contributed 400,000 records of over 11,000 species on the iNaturalist Taiwan platform. The achievements in 2024 have been very fruitful, thanks to the dedicated fellows all over the world for their efforts to safeguard nature habitats and all species to thrive !



Current Status of SOW's Direct Land Holdings

We continue to conduct monthly surveys at SOW Land No. 1 in Dongshan of Yilan County and Land No. 2 in Xizhi Dajianshan of Taipei City. As of October 31, a total of 100 fellows have visited Land No. 1 and submitted 12,315 observation records of 1,401 species. In 2024, 4-night observation activities and 2 visits for volunteer training trainees were organized; 31 fellows submitted a total of 1,893 observation records of 437 species at SOW Land No. 2,.

Thanks to the fellows who have long supported the work of investigation and patrol.

In July 2024, SOW made great progress in the task of directly holding land. The family of a member in Central Taiwan donated an inheritance according to his will, the former chairlady of SOW, Ms. Liu Yuemei encouraged SOW's members, volunteers and the public to donate small amounts as land acquisition fund, hoping to purchase SOW Land No. 3 in Central Taiwan. After repeated site surveys and evaluations, we decided to purchase a 3-hectare forest land in Shitan Township, Miaoli, and named it SOW Land No. 3 - Miaoli Shitan Xiangyuanwo. So far, the preliminary vegetation and fungal survey has been completed, and the automatic camera will be installed in the future. SOW will keep moving towards the path of direct land holding so as to protect more habitats, and look forward to Land No. 4 and 5 in the near future.

Wugu Wetland Beach Restoration for Waterbirds

As the number of beaches for sandpipers to rest and forage in Tamsui River basins decreases, the birds coming from afar are facing predicaments. In order to improve this situation, SOW and High Riverbank Construction Management Office have jointly created a beach suitable for use by sandpipers in the Wugu Wetland starting from2017.



In the past, reed removal work started at the end of August in order to make the beach ready for the early-arriving migratory birds to use. We have also seen black-winged stilt, Pacific golden plover and Eurasian curlew coming to stay for a short time. In 2024, we intended to remove reeds at the end of August or early September, but unfortunately, we had to postpone the work to November, but still in time for the winter birds to overwinter.

In recent years, the mangrove forest outside the Luzhou dike has been removed to create a large beach and attract many migratory birds to winter. After the reeds are removed, the intertidal shore can be used by waterbirds during different tidal stages. It is expected that there will be a lot more little visitors showing up on the beach in 2025.



Safeguarding Urban Yuanjhong Harbor Wetland

Yuanjhong Harbor Wetland is located at the boundary of Nanzi District and Ziguan District in Kaohsiung City. Formerly a fish pond, it borders the Taiwan Strait to the west, with Houjin River and Dianbao River flowing through its north and south sides respectively (it's an alluvial plain in terms of terrain). The wetland is divided into two areas, east and west, by the Nanzi Sewage Treatment Plant. The east area is some distance away from the estuary, and its water source mainly relies on the discharged fresh water from the sewage treatment plant, forming a freshwater pond ecosystem.

In order to reduce human disturbance and preserve the space for species to rest, the east district of the wetland is currently classified as an ecological conservation area and not open to the public. After the enclosure, the space has resumed natural succession with rich vegetation layers and attracted many birds to visit. Common winter birds are cormorants, mallards, northern shovelers, little grebes, tufted ducks, Eurasian widgeons, etc. Even the endangered black-faced spoonbills and oriental white storks have also shown up here.

On October 1, 2022, SOW Kaohsiung chapter signed an MOU with the Maintenance Division of the Bureau of Public Works of the Kaohsiung City Government, to promote the public awareness of natural ecological conservation. It's a big step for both parties together to promote urban greening, natural ecological conservation, climate change mitigation, and livable cities. The tasks include environmental monitoring, nature resource surveys, habitat management works, and education activities to promote the concept of habitat protection and enclosure in order to retain and restore biodiversity.

Lotus Temple Wetland – Insectivorous Plant Conservation Achievements

The habitat volunteers of SOW Hsinchu chapter have been engaging in insectivorous plant conservation for a long time and achieved remarkable results. Rare wetland species listed in the Red Data Book are their priorities to conserve, such as *Drosera finlaysoniana, Drosera spathulata and Drosera burmannii*, these are important insectivorous plants conserved in the Lotus Temple Wetland in Zhubei. Some rare associated plants including *Formosana yelloweyegrass, drooping fimbristylis, Juncus ohwianus, Murdannia spirata, Centranthera cochinchinensis*, etc., need conserved urgently as they are critical to rich biodiversity of the wetland. For ease of management, the sample



area for rare plants was divided into four quadrats and enclosed with wooden stakes. The plants in the enclosed areas were marked with styrofoam balls inserted into bamboo sticks, which is convenient for the calculation of population size and distribution. Other works at Lotus Temple Wetland are as follows:

- After the Drosera finlaysoniana withers in winter, a large-scale mowing and digging is carried out to facilitate seed germination. This is done in December every year.
- Dig detention ponds and build dykes to intercept and store water. The retention ponds can attract different kinds of dragonflies, frogs, shrimps, crabs and aquatic insects so as to enrich the biodiversity in the Lotus Temple Wetland.
- After removing epiphytes from the riverbed, a small but steady surface water runoff has been dredged along the riverbed. It has slowed the spread of nearby grasses and made more space for wetland plants to grow.

You are invited to participate in working holidays at Lotus Temple to experience the beauty of wetland ecology and help maintain the habitat so that precious insectivorous plants can thrive on the site.

Long-term Conservation Plan: *Mortonagrion hirosei*

The restoration pond for the *Mortonagrion hirosei* created in 2020 at the Huanggang Creek Wetland has increasingly terrestrialized due to the high mud content of Huanggang Creek and is inhabitable for the larvae of *Mortonagrion hirosei*. As the situation couldn't be improved by manpower, we decided to use machinery tools to restore the pond and also to take this opportunity to fix all the pending problems, especially siltation and insufficient water intake, which are improved significantly after large-scale amendments. Although the construction has been completed, it is a pity that we couldn't see the final results in 2024, because the hydrological conditions changed completely and required further observation and adjustments of each pond. In addition, it takes time for the reeds to gradually grow back to shelter the adult insects and larvae. It will not be until 2025 that we can see the results of the restoration.

The *Mortonagrion hirosei* habitat in Wugu Wetland also faces the problem of terrestrialization and needs urgent intervention. It's hoped that the pond at Huanggang Creek will be successfully restored and all the efforts and experience can be passed on to Wugu Wetland, so as to increase the population of the *Mortonagrion hirosei* in Wugu Wetland.





Celebrating Mother's Day by Protecting Waterbirds

In order to convey the significance of "waterbird protection" to the public, SOW Taipei chapter carried out the construction of protection fences the day before "Mother's Day" in 2024 under the leadership of experienced volunteers. With many years of experience, the team completed the fence in a record time of 1.5 hours, to create a safe space for parent birds to breed at ease.

SOW Taitung chapter has focused on the improper development of Zhiben Wetland and further noticed the bird breeding grounds at the mouths of Taitung's streams. This year, the chapter resumed the conservation promotion activities and recruited "breeding season lesson plan and interpretive volunteers" to promote the messages in schools and communities, so that more people can learn more about these precious visitors who fly thousands of miles just to raise chicks here.

According to wild bird societies and scholars across Taiwan, various waterbirds migrate and breed along the coastline from March to July every year. During this time, it's common to see numerous adult birds running around on the beach. But sadly, the volunteers also have witnessed stray dogs preying on adult birds and eggs, or even worse, moving off-road vehicles running over bird eggs or chicks.



Therefore, SOW will continue to call on the public to stop coastal cleanup during the peak breeding season (April to June in Northern Taiwan and March to May in the south), or to clean the streams or mountains instead. Four-wheel drive vehicles also should not run on the beach during the breeding season. While celebrating Mother's Day, we should not only give blessings to mothers all over the world, but also help parent waterbirds to breed with peace of mind.

Zhuoshui River South Bank Mangrove Thinning Project

The Zhuoshui River runs through Changhua, Nantou, Yunlin, and Chiayi county, and flows westward into the Taiwan Strait. It is the boundary river between Changhua County and Yunlin County, forming gentle-sloped mudflats at the estuary which is also Taiwan's largest intertidal zone, featured with a rich biodiversity and home to a wide variety of benthic organisms, making it a very important habitat.

In the early days, mangroves have been widely acknowledged as a natural barrier to protect shorelines from wind and sand as well as to attenuate waves. They were artificially introduced in the early 20th century and then expanded rapidly along the estuary and formed pure forests. The northern coastline is mostly populated by Kandelia, while black mangrove dominates the estuary of Zhuoshui River between Changhua and Yunlin.

The expansion of mangrove forest has jeopardized biodiversity and also led to many



adverse impacts, including benthic invertebrates being threatened because of habitat compression; the canopy of mangroves blocks a big amount of sunlight from reaching the understory, causing foul odors and accumulating garbage and the rampant infestation of Taiwanese biting midge. Moreover, the root system causes sediment deposition and river width shrinkage, which reduces the ability of an estuary to discharge floodwaters from heavy thunderstorms or sudden heavy rains, and lead to stagnant water and even flooding.

In summary, there is a need to control the expansion of mangroves, regardless of the maintenance of ecological habitats, flood drainage for residential safety, or improvement of pollution caused by garbage accumulation.



Biodiversity: Ecology of Fuyang Natural Park

Since 2019, experts and scholars have been commissioned to conduct ecological censuses in Fuyang Natural Ecological Park. The report of insect survey revealed, in the early stage of the survey, *Jamides alecto dromicus* was the dominant butterflies across the park, while *Athyma selenophora laela (Fruhstorfer)* outgrew others specifically in the forest zone; until after 2022, *Athyma selenophora laela (Fruhstorfer)* started dominant across the park. Up to June 2024, the results showed that dominant butterflies in February within the peak season



are *Athyma selenophora laela (Fruhstorfer), Cyrestis thyodamas and Cupha erymanthis*; 22, 15 and 15 individuals were found respectively. As *Athyma selenophora laela (Fruhstorfer)* prefers to live in forests, it is speculated that the forest environment in Fuyang Park is gradually maturing.

A total of 654 individuals of parasitoid wasps from 18 families were recorded in Fuyang Park in 2023, which is more than the records in 2022 - 535 individuals and17 families. As parasitoid wasps are highly specific in host selection, coupled with complex life histories and high trophic levels, they are associated to host habitats to a certain extent. In recent years, they are often regarded as one of the indicators for ecology and biodiversity. Therefore, it is inferred that the biodiversity in Fuyang Park has improved.

Habitat Survey: 2024 City Nature Challenge

The City Nature Challenge is a global biological survey event that takes place over a four-day period every weekend at the end of April. Nature enthusiasts around the world flock to the mountains and the sea, using cameras and mobile phones to record all the creatures



country's precious ecology with people all over the world, win for the country in the competition, but also reserve critical biodiversity records for the country.

The City Nature Challenge has entered its ninth year. From only two cities and one country participated (the United States) in 2016, now there are 51 countries and 690 cities participating. SOW, as the host of Taiwan's City Nature Challenge, has been engaged since 2020.

During Taiwan's 2024 City Nature Challenge, 1,960 people participated in the event and recorded a total of 55,745 data points covering more than 5,160 species, including at least 200 rare, endangered or threatened species. Among the records of various divisions, the number of species recorded in the Chiayi-Yunlin division ranks 15th in the world!

This achievement comes from the active participation of all Taiwanese citizens. We would also like to thank the fellows in the preparations for the event. It’s hoped that in 2025, more people will participate in this world's largest citizen science event, leaving behind precious records of Taiwan's natural ecology and sharing with the entire world.

Safeguarding Leopard Cat at Fazi River in Taichung County

With more protection actions taking place on the Fazi River, its ecology has gradually improved and the leopard cats that live in areas such as the Maoluo River in Nantou started moving northward into the Fazi River through the confluence of the Wu River and the Fazi River. The images of leopard cats captured multiple times by automatic cameras prove that the stream corridor is an important living space for leopard cats and other wild animals.

This year, SOW Taichung chapter cooperated with Leopard Cat Association of Taiwan to organize various experience events, such as radio transmitter tracking experience activities, chicken coop fence improvement work holidays, leopard cat habitat protection work holidays and conservation promotion exhibitions, etc., leading the public to know the star of shallow mountains in Fazi River - leopard cat, and to reflect on what we can do to protect them.

In addition, we also undertook the leopard cat picture book project commissioned by the Taichung Branch of Forestry and Nature Conservation Agency, which took a year to publish "Let's Go! "Wild Tiger". In the future, SOW will continue to promote the picture book to convey the happenings in Fazi River through storytelling.







Celebrating its 29th Anniversary, SOW Continuously Growing and Thriving on Environmental Education

SOW enters its 29th year in 2024 and continues to grow in various fields of environmental education. Volunteers in various groups such as interpretive education, parent-child education, children's education, special education, and green map, use their respective expertise to communicate across units and international communities to expand the impact of environmental education, hoping to enable more people to make behavioral changes in their daily lives to cope with the impact of the impending climate change.

The Parent-Child Education Committee takes "Habitat Protection: Caring Protection, Secret Garden" as its theme and incorporated the concept of habitat protection into the group gatherings of Little Ant, Dazzling Bee, Running Deer and Soaring Eagle. In addition to continuously providing services in schools and promoting a variety of reality puzzle games, the Children's Education Committee also conducted a mobile campus summer camp for the first time, as well as organized EarthKeeper guide training, hoping to promote regular camps and children's education lesson plans to teachers and students and remote schools across Taiwan. In addition, the team also has exchanged and shared teaching plans on children's education with schools and communities in Malaysia. The Green Map Development Team has also made a variety of new breakthroughs, such as launching online interactive platforms on top of walking tours and escape rooms, thereby sharing the creativity and spirit of the SOW Green Map with the world. The Special Education Committee organized the "10th Special Education Guide Training" this year, which is to pass on special education professional knowledge and the approaches to accompany disabled people to explore nature. SOW Fazi River Group continues to carry out regular stream cleanup, water and land ecological surveys, speeches, and campus environmental education programs.

In addition to regular nature experience activities, the Interpretive Committee strives to break through filter bubbles by organizing a variety of online environmental education activities, indoor and outdoor activities such as eco-spiritual healing, green care, and adventure therapy. The Promotion Speaker volunteers deliver speeches to exert influence in a most efficient way by talking to a large number of audiences each time. Some SOW chapters have also developed localized speech content to meet their specific needs. Aside from speeches, workshops, field visits and other activities, the Climate Change Education Committee also organizes workshops on various topics: including farm-to-tables, tree measurement, energy conservation, zero waste, etc. Moreover, it conducted climate change volunteer training for Kaohsiung and Yilan chapters to increase public literacy of Taiwan's net zero pathways and lead them to take actions for energy conservation

and carbon reduction. The Environmental Action Forum hosted by the International Affairs Committee is entering its tenth year. This is the year with the most participating teams since the pandemic, including two teams composed of international students, achieving the purpose of international exchange and learning. In October, we also received an NGO representative from Nepal to exchange experiences on forest restoration and environmental protection.

Finally, the Research and Development Committee strives on the planning and implementation of "farm rights" to conserve enclosed farmland habitats. The team also called upon the government to make more efforts on the implementation of Wetland Conservation Act, source reduction of carbon emissions, and stop projects of heavy implantation of mangroves for the purpose of increasing carbon sinks. Therefore we can pass on a beautiful ecology to future generations.

2024 Environmental Education Achievements

The eleven chapters of Society of Wilderness (SOW) in Taiwan regularly organize indoor seminars, training sessions, learning courses, and outdoor experience activities for volunteers in various groups. We design content specifically for children and families, take part in environmental initiatives, and carry out actions to let the general public become more familiar with us.

Item	Number of Sessions	Number of Participants
SOW Family Group	267	6,106 1,972 families
Children's Environmental Education	412	10,091
Initiatives Earth Initiatives (Summer power off,Natura Observation Activities,City Nature Challenge), Ocean Initiatives, Earth Film Festivals, Beach Cleaning...	35	2,564
Environmental Actions River Waste Survey, Wild Creek Investigation, Ocean Walk, Learning by Walking, Environmental Action Forum...	70	2,961
Seminars Promotion Speeches, Weekly Meetings, Monthly Meetings, Guided Reading at Film Festivals, Issue Promotion, Campus Tours...	830	54,010
Volunteer Training / Advanced Courses How to be a Volunteer, Interpreter, Promotion Lecturer, Children's Education Guide, Leader of Beach Cleaning, Marine Waste Surveyor; Climate Change; Energy Conservation Promotion; Editing and Interview Skills; Habitat Conservation; A Heart with Ecology; Wetland Care; Ocean Volunteers; Special Education; Empowerment...	390	5,290
Learning Courses Nature Observation, Nature and Humanities, Ecology Interpretation, Carpentry, Photography, Painting, Indigo Dyeing, Board Game, Green Life Map, Energy Conservation Workshop...	122	1,728
Experience Activities Point-count Observation, Nature Experience, Special Nature Experience, Habitat Work, Working Holiday...	586	19,978
Others Market Booths, Visits, Chapter Celebrations, Energy Conservation exhibition...	107	6,210
Total	2,819	108,938



The interpretative Education Committee Striding Steadily

The fixed spots guarded by SOW are rich in flora and fauna. Nature Interpretive teams at each fixed spot have made long term efforts to protect, investigate and record species. In additon, they also regularly conduct nature experience and education activities to inspire people to love nature.

The Interpretive Education Committee has initiated and participated in eco-psychology and green care events over the years. In 2024, the team made use the public-raised funds to organize four sessions of eco-spiritual healing camp and six green care workshops, as well as to partner with related fields such as mental health, horticultural therapy, adventure therapy, dark sky and astronomy to organize seminars and workshops, with nearly 1,200 volunteers and the public participating. As of land acquisition, SOW received a piece of hillside land provided by Nan Ya Co., Ltd. in 2022, located in Xizhi, adjacent to the valley on the northeast side of Dajian Mountain. Currently, volunteers from the Taipei chapter conduct monthly species surveys and use iNaturalist App as a recording tool.

After the pandemic, the Interpretive Education Committee has planned different series of online courses and carried out up to 120 speeches in 2024, reaching 22,080 people, an average of 184 audiences per session. Ninety percent of the participants gave positive comments and indicated the need to continue the efforts. We plan to deliver 100 online education courses next year, hoping to break through the bubble filter and expand the influence.

Promotional Speakers Connecting the Public with Nature

SOW' biggest hope is to lead people to experience the beauty of nature in an outdoor environment, but this approach limits the number of participants. Promotional speeches conducted indoors or online can reach the largest number of people in the shortest time. In addition to leading the audience to immerse in nature through well-structured content, the speakers also introduce various natural experience activities, working holidays, volunteer training, etc. held by SOW to encourage people to get close to nature.

The lesson plans for promotional speeches are edited and improved constantly. We don't just cover the wonders of nature but also update the issues of environmental destruction. Each chapter has constantly incorporated the content with local initiatives and consolidated volunteers from various groups to synergize the content of speeches, nature interpretation and habitat work.

Nature promotional speakers are the bridge to connect the public and environmental protection. The knowledge of nature and communication skills are just the basic skill set of the three-month training. After that, the speakers need to keep learning from nature. Changing the world starts with changing yourself.





The backbone - SOW Parent-Child Group

The former president, Yuemei Liu, once emphasized: "There are many different ways to protect a piece of land. As a non-profit organization, SOW does not seek profits but the benefits for future generations." Only when fireflies return to urban parks and the ecology thrives, can we reserve the beauties for future generations.

The primary mission of the Parent-Child Education Committee in 2024 is "Habitat Protection: Caring and Protection, Secret Garden" which is also consistent with the theme of "Environmental Ethics" in the twelve-year national environmental education framework. Habitat protection is the main core concept introduced and followed by all Parent-Child group gatherings, training and activities across four subgroups, namely ants, bees, deer and eagles. Each subgroup has shared their individual actions in the SOW podcast this year. These are not just team-building activities, the parent-child groups are at the forefront of environmental action.

Great Accomplishments on Children's Environmental Education Group

Children's environmental education team continues to thrive in 2024. In addition to delivering speeches in schools across Taiwan, the team also actively introduced earth education programs and accomplished greatly. A number of outdoor nature games designed for families and teachers as well as mobile summer camps based on 11 sets of teaching plans were launched.

The team completed the first Earthkeepers camp in July, and held training for local activity guides In November and December. We plan to launch an immersive experience program as the main feature of Qingshui Lake base in Yilan County. In the future, we will organize the camps for schools across Taiwan to exert influence on more teachers and students.

SOW volunteers across Taiwan came up with the idea of nature scavenger hunt games. A series of training sessions were conducted for voluntary speakers to provide campus services in different chapters, including the 4th session in Yilan, the 3rd session in Taichung, and the 11th session in Taipei. When Taipei Children's Education was first established, there were only a few volunteers. After thirteen years, there are more than one hundred active and experienced speakers nationwide. Up to November 2024, we have delivered approximately 412 campus services, which means that there will be at least one speech delivered on campus every school day. Over the past 13 years, 2,825 services have been delivered and reached 611 schools,



70,564 teachers and students. In the future, the Child Education team will carry on training new volunteers to serve in schools and expand the influence. At the same time, we also plan to reach schools in remote areas across Taiwan, hoping to inspire more people to work together for the environment.



Climate Change Committee, Actions to Improve Climate Resilience

Global warming is escalating. Since July 2023, the average monthly surface temperature has exceeded the threshold set by the Paris Agreement by 1.5°C for more than 12 months in a row. We live in a time where we urgently need to make changes in our daily lives to strengthen the resilience of individuals, families and communities to cope with the inevitable climate impacts.

The Climate Change Education Committee organizes educational activities such as speeches, workshops, forums, and field visits to build climate change literacy among the public, so they can adopt green lifestyles, pay attention to Taiwan's pathways to net zero emission, fulfill their citizen responsibilities, and consciously reduce carbon emissions. In 2024, 6 SOW chapters organized 8 training courses on different themes including farm-to-tables, tree measurement, energy conservation, zero waste, etc. In addition to the existing volunteer groups continuing to carry out customized training and promotion efforts for local communities, Kaohsiung chapter and Yilan chapter have also started training climate change education volunteers to help expand the scope of educational activities.

Research and Development Committee Exercising Agricultural Right

SOW's Research and Development Committee is one of the few committees that is not primarily run by volunteers. Its main purpose is to integrate the needs of various committees and assist in research on related topics; their work includes data collection, investigation, analysis and planning, as well as making feasible recommendations for other committees to implement.

One of the important tasks of the committee this year is to assist the Hsinchu chapter in planning and exercising "agricultural rights" of a citrus orchard. SOW cannot directly hold arable land for conservation purpose as the Agricultural Development Regulations stipulate that arable land holders are only limited to natural persons, agricultural enterprises, and agricultural-related foundations. However, applying "agricultural rights" allows one to carry out conservation activities on other people's land (including arable land). By doing so, SOW can fulfill the vision to enclose agricultural land for conservation. If SOW obtains the citrus orchard's agricultural rights, it will set a new benchmark of conservation, which is worth looking forward to.



This year we also address the issue of mangrove carbon sinks by calling on the government to value and realize the core of the “Wetland Conservation Act" by stressing retention of biodiversity, strengthening the wetland conservation network system, facilitating wetland ecological conservation and wise use, and ensuring zero net loss of important wetlands. Carbon reduction should be achieved through substantial reductions at the source of emissions. The plan to intensively plant mangrove trees to increase carbon sinks must be stopped. The issue requires more people to pay attention.

Environmental Action Connecting International Communities

The preliminary competition for the 10th Environmental Action Forum was held in April by fellows from Chiayi, Hsinchu, and Taoyuan chapters. A nationwide publicity campaign was launched and attracted the largest number of teams to participate since the pandemic eased. Before the final competition, all volunteers have made full preparations. The International Affairs Group invited and trained a large number of middle school students to improve their expression skills on hosting the forum. In the end, each group of volunteers successfully completed their tasks. The contestants of the final round included youth, teen, adult and English groups. There were two teams of English groups consisting of international students from



universities, and we temporarily recruited a voluntary translator to assist. We also encourage all participants to talk to the foreign teams to exchange ideas and learn from each other.

In mid-October, the committee received a visitor representing a Nepalese non-governmental organization and took him to visit the Qingshui School base, Fushan Botanical Garden, Shuanglianpi and so on. The visitor was also invited to record a podcast to share his organization’s efforts on promoting the concept of Miyawaki Forest in Nepal and the forest restoration projects it has carried out. During the tour, we led him to embrace the beautiful ecology of Taiwan and experience the energy of SOW volunteers.

We hope to expand the recruitment of international affairs volunteers in the future, boost the momentum, and work together to complete more international tasks.

Highly-Creative Green Map Group

In recent years, the Green Map Group has entered a new era under the help of skill-based volunteers, who help transform the experience accumulated by predecessors over the past 20 years into the form of walking tours, board games, escape rooms, reality puzzle games, electronic maps and online interactive platforms. With the vigorous promotion of Green Map fellows, 2024 is a fruitful year.

The Green Map board game is not only available in Taiwan; the American Green Map System has also shared the process of promoting Green Map of SOW Taiwan on their official website several times.

Volunteers shared the Green Map board game to school teachers, social service students, and guides of SOW parent-child groups, so as to achieve a more efficient and powerful promotion effect of Green Map. The reality puzzle game is self-guided, users only need to download the APP on mobile phones, and visit the venues recommended by Green Map to play. The game



has attracted more than 5,000 users as of this year. We will constantly enrich the content and launch an online interactive website to showcase the creativity and spirit of Taiwan's Green Map with the international communities.

Leading People with Special Needs to Explore Nature Accessibly

The Special Education Group takes disabled people and their companions to experience nature; leading visually impaired friends to "listen" to bird chirping; and guiding physically disabled people to learn about plants and experience nature with their five senses. The group, for the first time, hosts indoor activities to interact with elderly people with limited mobility and teach them to create artwork with natural objects. In July, the group held "The 10th Special Education Guide Training" to pass on related professional knowledge and delivered 6 service events from August to the end of the year, including: Taipei City Disabled Services Promotion Association event at Da'an Forest Park, Shuanglian Elementary School special needs student campus tour, nature experience at the campus of Wenshan School of Special Education, nature tour at Hsinchu Park for Visually Impaired Association, Yongchunbi tour for Xiangshan Farm and so on. In early November, the group conducted "Flying Angel Training " for Winbond Electronics Corporation volunteers and then assisted these corporate volunteers to lead visually impaired people to explore the ecology in Hsinchu Park. Special thanks to Winbond Electronics's sponsorship to support special guide training and services, as well as for their enthusiastic participation in volunteer training and accompanying visually impaired friends to experience the beauty of nature.

River Education Promotion

SOW Fazi River Platform continued to carry out regular stream cleanup in 2024. By the end of October 2024, a total of 11,000 people participated and picked up 19 tons of waste; other works including aquatic and terrestrial ecological surveys, speeches for river protection, and campus environmental education. The team has participated in a number of field trips and discussions on Fazi River-related issues, and cooperated with local junior high schools and elementary schools to carry out children camps. It also worked with local environmental education groups, NGOs, and authorities to set up the "Fazi River Environmental Education and Public-Private Cooperation Platform". Through the platform, it's hoped that all resources can be effectively integrated and used for campus environmental education promotion. We have also gradually built a public-private cooperation network with the Third River Management Branch of the Water Resources Agency, the Taichung City Government Water Resources Bureau, and local representatives to reach a consensus and fulfill the goal of making Fazi River an urban nature park.



Alternative SOW Nature Center

How does SOW "define" a nature center? Is it determined by each chapter itself? Such questions are indeed not easy to answer. SOW is an NGO and there is no common standard procedure or guidelines for SOW "nature centers" to organize environmental education activities or set up tangible equipment and no clear differences with the centers within the system.

All we can say is that there are really no common standards or guidelines for nature centres run by NGOs. In the early days, SOW believed that it's necessary to lower the entry barrier for people to participate in environmental education. As long as people are willing to go out and learn about the environment, any place can be a nature center. In other words, from SOW's point of view, various fixed observation spots could be regarded as alternative nature centers. It proves that the outside-the-system approach can also be used to promote environmental education and eventually safeguard these fixed spots. In recent years, based on on-site needs and the increasing resources of each chapter, SOW has set up nature centers in areas without designated fixed observation groups.

Here comes the question, how to distinguish between an outdoor "fixed spot" and a "nature center"? After understanding SOW's stance and organizational culture, the matter naturally came down to the momentum and strategy of the chapter. If a habitat or site is worthy of protection or a place where environmental education can be carried out, the chapter can evaluate whether the habitat should continue to be monitored or whether a dedicated team should be in place to pay regular attention to it, or even whether a stable amount of manpower and resources should be invested to expand it into a tangible nature center.

For example, the "SOW Wetland Plant Sanctuary" (now the Wanli Wetland Education Center), established in 2003, was established by Chen Dehong in cooperation with SOW to shelter native aquatic plants, and then human resources were invested to turn it into an official nature center.

The establishment of the "Shuanglianpi Ecological Classroom" is a project undertaken by the Yilan County Government to protect the Shuanglianpi Wetland. Similarly, in order to protect the "52-jia Wetland", "Wufengang Creek" and "Wugu Wetland", the "52-jia Environmental Education Center", "Wugu Wetland Ecological Park" and "Zhoumei Environmental Education Base" have also been established.

Later, responding to the needs of the disadvantaged, the Yilan "Qingshui Lake Environmental Education Base" and "Shuiyun Environmental Education Base" were developed, and the Hsinchu chapter established the "Youluotian Friendly Farming Base" to promote friendly farming. Other centers also focusing on environmental education include "Utung Nature Classroom" in Kaohsiung and the "Xiaoyeliu Nature Classroom" in Taitung. Therefore, the establishment of an SOW nature center is an adaptive development based on actual needs and the resources of the chapter.

In 2024, the pandemic eased, and the operation of each base increasingly matured or on the right track. However, because of the decisions of the landlord and local communities, the operation of "Youluotian Friendly Farming Base" and "Shuiyun Environmental Education Base" were forced to terminate in 2024. At the same time, some chapters also proposed new centers and conducted multiple site surveys. The following is a summary of the achievements of each center in 2024.

SOW Nature Centers in 2024

Nature Center	Features and Project Type
Wanli Wetland Education Center	• Taiwan rare Aquatic plant provenance shelter • Promote wetland ecological protection • Wetland construction and protection actions • Habitat protection volunteer training
Wugu Ecological Wetland	• The largest ecological wetland in New Taipei City • Constructing the biological Noah's Ark in Northern Taiwan • Outdoor environmental education (interpretation, surveys, working holidays) • Bird survey and monitoring
Zhoumei Environmental Education Center	• The front-line safeguard base of *Mortonagrion Hirosei* • Promoting education programs about river ecology • Promote ecological Tamsui River
Shuiyun Ecological Education Center	• Environmental education and fundamental training base • Enrich human and river geological structure evolution venues • Promote community agro-ecological maps • Shallow mountain ecology and environment survey • Demonstrate the prototype of citizen power plant
Namaxia Utung Nature Classroom	• A quality venue for nature experience • DIY house building project • Life education programs
Shuanglianpi Ecological Classroom	• Protect the national important wetlands (Shuanglianpi) • Conservation research base • Wetland environmental education • Promote friendly farming • Farming therapy and farm-to-table education
Qingshui Lake Environmental Education Base	• Demonstration of energy saving • Environmental education • Children's camping activities • Living education
Yilan 52-jia Environmental Education Base	• Protect wetlands of national importance (52-jia) • Promote eco-friendly farming • Ecological Theater • Promote common good in the community

Wanli Wetland Education Center

As the first private-initiated sanctuary in Taiwan to protect native aquatic plants, Wanli Wetland has been a temporary home to 150 species of native aquatic plants, 9 species of native fish, and other wetland species since 2003, in the hope that one day Taiwan's wetland environment could be friendly enough for native aquatic plants to return and thrive in their original home.

Each aquatic plant has specific requirements for environments. To accommodate a variety of aquatic plants, the key is to create wetlands with different landscapes. To maintain the diverse landscapes of the wetland, it requires long-term efforts and manpower. With the support of 7-ELEVEN's "Rediscover Love" charity fundraising platform as well as public donations and corporate partnership, a total of 12 habitat work activities have been held by the end of October in 2024, with a total of 145 participants. The trainees of wetland manager training in the previous year can now assist the site manager Chen Dehong in conveying the concept of protecting wetland ecology and leading wetland maintenance work, thereby boosting the momentum of the education center. We look forward to more people joining the force of wetland conservation in the future.





Wugu Wetland Park

It has been 20 years since we first adopted the Wugu Wetland. This year, we deepened the cooperation with the New Taipei City Government and signed an MOU to jointly manage the Wugu Wetland.

Waterbirds have always been one of the highlights of Wugu Wetland. In addition to maintaining the shoal to attack waterbirds, this year, the competent authority assisted in building a bird watching platform next to the large ecological pond; SOW volunteers also set up a temporary wall for the use of bird watching. This year, a small number of northern shovelers have arrived in the winter, which is just right for testing the bird watching wall. In the future, the wall will be continuously tested and adjusted. Bird watching will be an additional highlight of Wugu Wetland environmental education.

Zhoumei Environmental Education Base

In 2019, SOW signed an MOU on environmental education in Jiushuangxi with the Taipei City Hydraulic Engineering Office. The site named the "Zhoumei Environmental Education Base" was officially opened in 2021 and functions as a long-term protection and promotional base for the Wufengang River and *Mortonagrion hirosei*. Volunteers from the "Green Map" team came to use the base to host various environmental education activities to encourage people to learn about the ecology and



humanities of the Wufengang River and SOW's habitat protection work.

SOW continues to cooperate with the Taipei City Hydraulic Engineering Office to closely monitor the status of the *Mortonagrion hirosei* habitat in Huanggang River, hoping through multi-sectoral cooperation, the *Mortonagrion hirosei* habitat can be in better condition. Works of clean-up and invasive plant removal continue along the Wufengang River, however, the removal cannot keep up with the spreading speed of mile-a-minute weed, more frequent removal is needed to control the spreading. Water pollution is the biggest problem of the Wufengang river and very difficult to tackle without the introduction of urban planning. In the future, we will continue to watch the development of urban renewal projects, promote environmental education to instill ecological concepts to the local communities, and build up the momentum to address water quality issues. We hope that one day the public will be able to paddle canoes in the Wufengang River with peace of mind and embrace its beauty.

Shuiyun Ecological Education Center

The contract of Shuiyun Ecological Education Center expired on February 29, 2024. According to the contract, we can apply for renewal 2 months before the expiration, but the Education Bureau of Tainan City informed that other organizations were also interested in adoption, thereby they went through the "evaluation and selection" procedure instead. In accordance with the change, SOW's adoption contract was extended to the end of June 2024, and the selection work commenced on August 12. Unfortunately, we didn't win the favor of the panel members and so had to evacuate all facilities and relocate personnel by the end of November 2024. Now, we are still trying to find the best location to accommodate the equipment and materials.

After the evacuation time was confirmed, the training for parent-child groups was still carried out at the site as scheduled. In addition, the volunteer groups of the Tainan chapter, such as interpretation, climate change, habitat and other volunteer groups also frequently conducted training and workshops at this site. We are sad to see the operation forced to terminate, and can't help but reflect that if we could have known the local authorities' plans in advance, we would communicate earlier to reach a win-win situation and avoid a situation where multiple parties competed for resources.



Kaohsiung Namasia Utung Nature Classroom

The Utung Nature Classroom displays rich ecology along with the changing of seasons. Since the construction of the Nature Classroom, aside from the volunteers who participated in the construction, the parent-child group also has held group gatherings for 9 consecutive years in the form of a working holiday to embrace nature. This year's working holiday was carried out in April. Aside from firefly watching, the more important task was to amend the environment. The participants weeded the grass grown in front of the nature classroom and cleaned up the fallen leaves, dead branches and other items on the roof that would affect drainage.

We have also been collaborating with the Namasia Junior High School for 7 years and running a "Life Education Course" in the Utung Nature Classroom to invite indigenous elders to lead young students to know the ecology in their neighborhood.

The "Utung Nature Classroom Collaborative House-building Project" started in 2008. This huge project has come to its 16th year. Although experiencing countless typhoons during this period, we have finally completed the main structure - wooden roof frame, roof, clay sawdust rough wall, interior and exterior wall plastering and painting, floor primer and the wooden wall on the lower half of the interior wall. However, the work was put on hold this year due to many factors, hoping that in the coming year, we can resume the work at a steady pace and demonstrate the resilient nature of SOW fellows. Let's look forward to the great results next year.





Shuanglianpi Environmental Education Base

SOW has been protecting the Shuanglianpi habitat for more than 20 years. This year, we have successfully mastered the restoration techniques for all indicative aquatic plants and learned how to build up the best living environment for each plant to thrive and help more aquatic plants to return to the reserve. Last year, Salvinia molesta was eradicated to restrict its distribution, the wild water chestnuts transplanted this year are also in good shape. Hoping in the future we can gradually transform the water areas covered by invasive species into a paradise for native plants.

We have also successfully bred a sufficient number of rice fish and released them back into the reserve. Under continuous monitoring, several species of wild animals have shown up in the friendly farming fields, even timid small Indian civets have quietly made an appearance. It proves that wild animals can thrive in Shuanglianpi under the man-made efforts on restoration and land enclosure.

This year, it's thrilling to see Shuanglianpi volunteers actively participating and assisting in various activities. The experienced volunteers also continue to collect and compile photos

for the Shuanglianpi plant atlas. Hoping Shuanglianpi will attract more public attention in the future, and regain its beauty one day.

Qingshuihu Environmental Education Base

The hardware projects completed this year include improving the teaching environment, installing internet networks, and enhancing the security and convenience of teaching and external communication, mounting new solar panels to reduce electricity costs and carbon emissions during peak seasons, thereby alleviating the burden on the ecological environment. Other projects under design and preparation include: rainwater collection system, replacement of old power lines, and pruning dangerous trees. The works waiting for funding include: insulated blackout curtains in classrooms, regular maintenance of roof waterproofing and anti-ultraviolet protective layers, etc.

In terms of activities, there were 1 session of volunteer training, 2 work holidays for removing mile-a-minute weed, 2 training for nature healing volunteers and advanced workshops, 4 natural healing promotion activities, 4 food and agriculture education workshops, and 1 Earth Guardian Camp. As of October 2024, there have been 46 activities taking place with 930 visitors.

The base has gone through a short-term (2021-2024) stage of preparation, construction and trial run. In the future, it will continue to play a diverse role in promoting environmental education and managing the venue for public interests. Through conveying the knowledge, guided nature experience, we hope that the public can reconnect with nature and take actions to protect the environment.



52-jia Environmental Education Base

The debut of "Wetland Art Festival" replays the beautiful memories of the wetlands and showcases the unique charm of the 52-jia wetland with natural light and landscape. The highlight of the event was the immersive wedding reality show of "The Water Bride". The bride and groom rode on a duck boat with traditional ritual music background, slowly sailed towards a huge duck boat decorated with red ribbons, recreating the early wedding customs on a duck boat and immersing the audience in the ingenuity of integrating traditional culture with new ideas. The wedding also featured a stage play inspired from the traditional customs incorporated with the local Lize Guanghui Temple and Wushilin settlement as well as the theatre company's creative ideas.

In terms of activities, the team have conducted 10 bird ecology surveys, 10 drama workshops, 2 wetland art festival performances, 4 environmental education events, 2 mobile theatrical performances, 2 ecological floating island landscape art shows, publicity stall at Raytakan Restival, and 3 corporate volunteer working holidays, etc. to promote wetland protection.

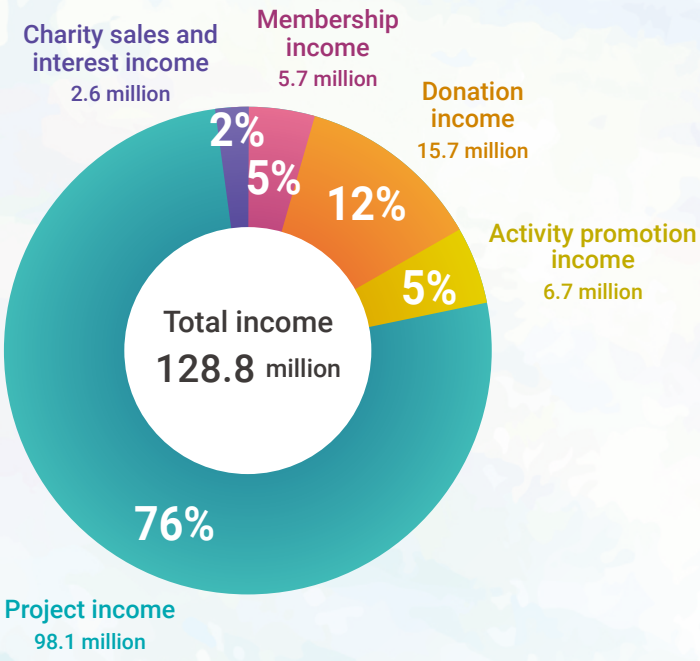
Featured with beautiful scenery and diverse ecology, the 52-jia wetland attracts a large number of migratory birds to inhabit. In the future, we will continue to conduct environmental education events to convey the history of the local community and the wetland environment, and call on the public to protect the 52-jia wetland and retain its natural appearance, so that both animals and human beings can live safely and peacefully.

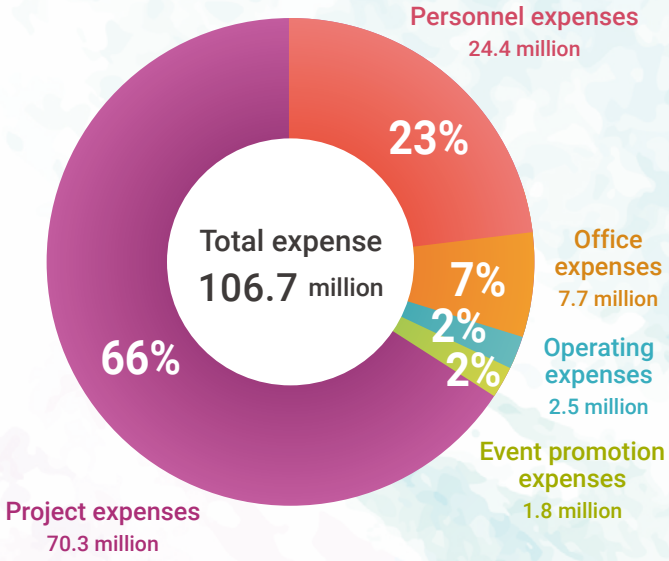
Meeting the Turning Point of Resource and Challenges

SOW's annual financial summary and analysis for the year ending December 2024 is reported below.

main income

Public support contributes approximately NT$120 million to total revenue in fiscal year 2024, however, regular donations decreased slightly, accounting for 12% of total income, membership fees remained at 5%, and event promotion accounted for 5% of total income. The above three items have always been the basic income of SOW. This year, project cooperation is the largest source of income, accounting for 76%. The remaining is charity items sale and savings interest accounting for about 2% of the total income.





Expenditure and results

Total expenditure for the 2024 fiscal year is approximately $107 million. Project expenditures are mainly used to support various work such as ongoing habitat conservation and environmental education.

The project cooperation includes 7-ELEVEN's "Rediscover Love" charity fundraising platform, cooperation projects with private and public sectors. SOW aggressively seeks all kinds of opportunities to convey the concept of environmental protection and to realize the mission of protecting habitats across Taiwan.

Corporate Sponsorship and Cooperation Projects

Practice sustainability and collaborate with SOW to facilitate change for the future.

Every choice we make for this land determines the way of life of the future generation. Your company can not only create economic value, but can also become a change agent. We sincerely invite you to collaborate with SOW to convert your business influence into a commitment to the environment.

Method 1- Mid- to long-term sponsorship on cooperative projects - blending environmental protection into corporate culture Approach 1-

Environmental protection is not a short-term effort, but a long life practice. We believe that every company is able to play a key role in changing the environment. SOW has deployed 11 chapters across Taiwan, safeguarding more than 85 natural habitats located in oceans, wetlands, forests, rivers, farmlands, mountains and other ecosystems. We hope to work with corporates to promote the following environmental actions in a mid- to long-term cooperation:

Corporates can choose preferred environmental themes or protect specific habitat types, therefore sustainable action should not be just a one-time CSR event, but also an integral part of corporate's core values to build up long-term brand influence.

Method 2: Corporate Volunteer Experience - Make sustainability an integral part of corporate culture

Corporate strength comes not only from its products or services, but also from the beliefs and values of every employee. Events of corporate volunteer experience allow employees to personally participate in environmental actions, feel the beauty and fragility of nature and cultivate a sense of respect and ownership for the environment.

This is not just an event, but a deepening and transformation of corporate culture. Only when sustainability becomes an intuitive choice of employees, can the company truly become a strong force for changing the world.

Cordially invite corporations to join us to make the environment better!

If your company is willing to work with SOW to promote sustainability, please visit our website or contact the Sustainability Department directly. We will explain in more detail to you and look forward to working with you to better the future of the motherland.

Collaborating with SOW to Transform Sustainability

Thanks to the participation of corporate partners, SOW is able to inject more energy to promote environmental education and volunteer empowerment as well as to facilitate more discussions and practices on environmental sustainability.

The scope of corporate cooperation is as follows:

Environmental Protection Project: carry out long-term habitat protection, species conservation, environmental inspection or volunteer training to carry out environmental education, children education or environmental protection projects.

Corporate Volunteer Engagement: Working with corporations to develop, plan and encourage employees and their families to participate and gain a deeper understanding of local environmental issues, and then take action.

Participation in Habitat Work: 11 chapters of SOW across Taiwan have been monitoring designated habitats for a long time, corporate employees are welcomed to participate in "working holidays" to restore and amend the habitat, or remove alien species. By participating in these activities, they can experience the conservation work in person and learn the significance of habitat management.

Respond to Advocacy: Corporations collaborate with SOW by hosting environmental lectures, public awareness campaigns, issue advocacy, etc.

wistron 緯創人文基金會

富邦人壽

Porsche Taiwan 台灣保時捷

Microsoft

聚陽 MAKALOT

H&M

LITEON Cultural Foundation.

Winbond Electronics Corporation.

Thanks to all the corporate partners for their long-term support to the SOW on promoting sustainable projects

DBS Bank Limited SGX D05
Chang Hwa Commercial Bank, Ltd.
Bank of America.
FORMOSA PLASTICS CORPORATION.
Viatris Inc.
Nefful International Holdings Pte. Ltd., Taiwan Branch (Singapore)
Novatek ESG
CLC Caring Scholarship
TUNG PEI INDUSTRIAL CO., LTD.
Dow Chemical Taiwan Limited
APPLIED MATERIALS SOUTH EAST ASIA PTE. LTD. TAIWAN BRANCH (SINGAPORE)
First Securities Incorporation
Pan German Universal Motors Ltd. UMT Taipei Branch
VEDA KM CORPORATION
L"OREAL Taiwan Co.,Ltd.
FedEx Express International B.V., Taiwan Branch (the Netherlands)
First Commercial Bank, Ltd.
Nanya Technology Corporation.
DECATHLON TAIWAN CO., LTD.
Ufi Space Co., Ltd.
UNITECH PRINTED CIRCUIT BOARD CORP.
SANITAR CO., LTD.
A. MENARINI SINGAPORE PTE. LTD. TAIWAN BRANCH
PixArt Imaging Inc.
BRIDGESTONE TAIWAN CO., LTD.
FRITZ JOU MANUFACTURING CO., LTD.
CORNING DISPLAY TECHNOLOGIES TAIWAN CO, LTD.

Only enterprises and groups with donations of more than NT$100,000 from 2022/11/1 to 2023/11/31 are listed.