



# Back each other up

Sometimes, when you walk alone while carry something heavy and barely manageable,

a kind regard or helping hand from others can relieve and warm up your heart. This is exactly how backing each other up makes you feel.

In 2018, big thanks to all SOW fellows for their determination to protect Da-tang algae reef, Zhiben Wetland, Matou Shan and Lianhua Temple in Zhubei.

Step by step, we have recorded what happened in every inch of Taiwan coastline; such as rapid screening marine debris with scientific methods, guarding Sauter's frog to pass roads during mating seasons, tidying wildlife habitats up in the Youth Park, Fuzhou Shan, Shuanlian Pi, Lienhua Temple Wetland, Wugu Wetland, Youluotien and so on.

By means of regular observation and recording, we have been promoting ecological stewardship island wide.

Fellows in Taitung, Tainan, Kaohsiung, and Hualien have been cautiously and diligently protecting wild creeks;

We are devoted to raising public awareness of the issues of Taiwan ecology and environment by means of onsite observation and environmental education.

We pick up pieces of trash on the beach and reduce plastic usage in daily life and activities.

Because of unconditional love to the land, we commit ourselves to these tough and challenging tasks.

Furthermore, with your support and backup, all SOW fellows and I will be more empowered and merrier to complete the missions.

There are a lot of ways to express your support, such as giving us a big hand, collaboration, and financial sponsorship. Every form of support is a strong and invisible force to us forward. Thank you for backing us up.

Chairman Yueh Mei Liu

# Applying Multi-approaches of Environmental Education to Preserve the Natural Assets of the Earth

The embarkment of Taiwan's Coastal Walk in 2018 enabled us to witness the beauty and sorrows of Taiwan's coastline. Unknowing when it started, Taiwan's coastline has been flooded with rubbish, wind turbines, and wave breakers. When did haze and deterioration cast a shadow over the beautiful Formosa?

The industrial revolution of the nineteenth century opened a new chapter of convenience of human life and also rapidly aggravated the global environment because of the breakthrough advancement of technology and knowledge. As everyone knows, the environment in which we live now is slowly changing, like a frog being slowly boiled by warm water. Humans are so accustomed to consuming the earth resources and indulging in the convenience and comfort at the expense of the natural environment and without knowing it's actually a greedy action and exploitation to the resources of the earth.

Forests, cities and oceans are different types of habitat and provide space for people and other living creatures to coexist; the natural environment, due to species succession, human development and reckless destruction, is facing a unprecedently severe threat. Our organization has been actively involved in natural habitat protection for 23 years with the consistent strategy – applying multi-approaches of environmental education and determined actions as well as constantly striving to sprout the consciousness and implement our ideas by the appeal of volunteers' collaboration.

Members and volunteers are two powerful pillars for non-profit organizations and cornerstones for sustainable development of SOW. With our firm belief, we have been cautiously asking support from members, volunteers and the general public. We hope to raise "applause" to support and encourage our fellows; to recruit sufficient "manpower" to fuel up organizational development and protection forces; to get solid financial support to sustain the protection missions so as to preserve the natural assets of the earth.

Look back to the hardship SOW has gone through in the founding stage, fortunately, our belief, vision and various protection actions were recognized by lots of partners. Our accumulative membership has soared to over 26,000 from 346 in the founding stage; number of active members remained stable at around 5,500. However, SOW still needs more members, volunteers and environmental conscious friends to join us on the efforts of sustainability of Taiwan's environment. We sincerely look forward to your participation – by investing your time or money to work with us to protect the beautiful motherland.



# Join us as Citizen Scientists to Collect and Count Marine Debris and to Promote Source Reduction Policies

# ICC Data Analysis - The Initial Success Contributed by Source Reduction

The "Little Ocean-loving Trip" website (cleanocean.sow.org.tw), built and maintained by the Society of Wilderness (hereinafter referred to as SOW) had collected 248 batches of coastal cleanup data in 2018 (21,725 participants, and 40,961 kg of waste collected on 85,815-meterlong coastline). Plastic bags collected by volunteers this year accounted for only 5.7% of the total waste which is record low in the past 14 years (the highest was 27.5% in 2008, meaning more than 2,700 plastic bags in every 10,000 pieces of marine debris that year). This inspiring discovery reflects the fact that 80,000 stores, including take-out beverage ones, stopped providing free plastic bags to consumers, which proves that source reduction on the consumer end really has positive influence on oceanic environment. The data also provides powerful quantitative references for EPA to roll out bans on plastic products in 2020, 2025, and 2030.

# No Cooperation, no Solutions! Marine Debris Governance Requires Collaboration across NGOs, Regions and Authorities

In order to continuously promote the effective governance and source reduction of marine debris, SOW, as one of the founders of "Taiwan Marine Debris Management Platform", has continued to exert its influence in eight working meetings. In February 2018, SOW collaborated with seven offices of the Environmental Protection Agency and six fellow NGOs to develop the first "Action Plan of Marine Debris Governance in Taiwan" and introduced six plastic reduction initiatives. In March 2018, SOW successfully won the opportunity to participate the 6th International Marine Debris Conference in California USA to share Taiwan's experience and efforts with 700 representatives from 50 countries around the world.

# After Years of Solid Field Study and Data Analysis about Marine Debris, We have Published the results in academic journals.

Decades of experience on marine debris issues have made us realize that plastic reduction is not just a slogan, but a meticulous social communication movement. Especially when dealing with the government and industries, solid, long-term and large-scale environmental data are essential to clarify the current situation and focus on issues. In 2018, with the guidance of Japanese and Korean experts, SOW and the Greenpeace jointly launched the "Taiwan Marine Debris Rapid Assessment" protocol and trained 50 "marine debris rapid assessment investigators" to audit all marine debris and identify pollution hotspots at 121 stations around the island. The first rapid assessment project found out that half of marine debris was piled up along 10% of the coastline and estimated 2,000 garbage trucks are needed to clean all up. The fourth survey is expected to complete in April 2019 and the full results will be announced in June 2019. We also brought our rich field experience back to the policy communication platform to be shared and successfully lobbied the EPA to launch the national marine debris survey and origin country monitoring plan in 19 cities and counties located in coastal area this year as well as to provide suggestions to advance research projects such as aerial photography and artificial intelligence identification.

When coastal cleanup and plastic reduction become a national enthusiasm, the results of the 2018 plastic-free ocean project show that SOW can still play a key role in the marine debris problem through collaboration of citizen science and policy-making. In addition to the Sixth International Marine Debris Conference (Penghu ), Marine Conservation Seminars (Kaohsiung) and other important occasions, SOW also shared 12-year coastal cleanup data with scholars for academic research and published in the scientific journal - Marine Pollution Bulletin (Vol. 135, pp. 862-872), with the affirmation of the international academic community)

## Take a Walk at a Coast, You will Know and Love it more.

What is your impression of the beach? Which beach do you go? The beaches where you go to clean are full of trash; when you travel, it's easy to find cemented harbors or artificial beaches.

Taiwan's coastline stretches more than 1,000 kilometers and few people have recorded along the coastline by foot. A group of SOW volunteers commenced the coastline walk from Taoyuan. Some people took pictures and recorded, while others were in charge of logistic support along the walk. They witnessed and recorded the beauty and sorrows of Taiwan's coast; garbage on the beach varies according to the area as well as the amount; the so-called coastline protection is actually layers of wave breakers; the bodies of creatures, including cetaceans, fish, and livestock lie on the coast. Of course, there are also stunning scenery such as dawn, secret spots and sunsets.

A total of 451 people so far have participated in the walk around the coast of Taiwan. At times, we had to detour or stop because some coastal terrains weren't accessible or when the weather was bad, but we had successfully completed 489km-long of video record and wouldn't forget the surprises and discoveries we encountered in the process. Because of the walk, we know and love Taiwan's beautiful ocean better.

In the future, we will continue to "love the ocean without an end". We will always love this dark blue sea forever and ever.



# Achieving the Vision and Objectives of Wilderness Land Acquisition and Protection

2018 sets an important milestone on the efforts of habitat protection by acquiring our first wilderness land which declares that SOW officially takes the first step toward its vision and objective of land acquisition and protection, although it took us 23 years. However, we truly believe there will be more successful wilderness land acquisition after this one.

In addition to wilderness land acquisition, long-term entrustment (Kaohsiung Tianliao Agricultural Land) and land lease conservation (Ilan 52-jia Wetland, Yilan Shuanglian Agricultural Land, Hsinchu Dashanbei Yuluotian), and the continuing adoption of Taipei Wugu Wetland and Fuyang Park are also important achievements on obtaining land management rights this year.

### Consensus on Habitat Protection Work

In May 2018, the Habitat Work Committee conducted the first SOW habitat work consensus camp and invited fellow volunteers from all chapters who have been engaged in or intend



to develop habitat protection to discuss the three issues of "how to implement the concept of our habitat protection", "how to establish habitat management mechanism and manpower cultivation" and "how to establish partnership with local authorities and communities". At the end, three initiatives out of conclusions gained unanimous support among the

participants - "one chapter adopts one habitat, one habitat a year, accept commissions by private or governmental habitat management projects". Corresponding action plans of those initiatives include "active fundraising and land acquisition, implementing habitat investigation and conservation, and setting up habitat work task force in each chapter"

# Empowering habitat protection task force

In order to implement the actions concluded in the consensus camp as well as to help local fellows of each chapter to understand and be more aware of habitat protection activities



in Taiwan, SOW's Habitat Work Committee and the Homeland Care Committee jointly hosted a field trip to visit important wetlands on the west coast of Taiwan. By means of field trip and conversation with the locals, the trip attempts to get deeper understanding of changes of local industries and the efforts that locals have made to protect their hometown from the threat of strata subsidence and exploitation of petrochemical industry. Through the feedback from the participating partners, we've seen more affirmative belief of locals on guarding natural habitats, people also expect to see more habitat field trips included in joint-training programs in the coming year.

In addition, in order to train more volunteers to join the of habitat protection force, not only has Taipei chapter conducted the sixth wilderness habitat protection training in 2018, but also Hsinchu chapter is also actively planning similar training scheduled for next year, so there will be more volunteers to get involved in actual habitat protection



works including habitat environment monitoring, removing invasive species, habitat construction and maintenance as well as habitat protection education. All of these efforts aim to the realize the objectives of habitat governance and conservation

### Work Results and Outlook

Over the years, SOW has made a great deal of efforts to habitat protection and accumulated a lot of experience and achievements, but lacked organized compilation and proper exposures making these efforts invisible. By participating the 2018 Wetland Convention, the Habitat Work Committee has compiled more than a dozen of abstracts and posters disclosing SOW's efforts on wilderness habitats protection. These documents aren't just a review of current stage, but also show the efforts and achievements of SOW in recent years.

Looking into the future, in addition to further realizing our visions on the existing foundation, SOW will actively partner and collaborate with the authorities and local communities, and also look forward to seeing more new bloods who share the same ideas with SOW and join us on protecting nature habitats hands in hands.

# Practical guardianship

The purpose of this association is to "...to obtain the custody and management rights of the wasteland, to protect it, to let nature manage itself and restore its vitality..." Therefore, through the purchase, lease, adoption, cooperation, commission or donation, the purpose is achieved. We practice and operate related tasks during these processes.

In addition to the results of the first land purchase this year, there is no lack of consultation on private or public land due to acknowledging the concept of our organization. According to the situation; except for a small number of wasteland commissions, which are adopted and managed by our organization, most others are cooperation with private or enterprises to reuse idle lands. Those include ecological construction, biological resources census,



park planning and environmental education cooperation.

The above-mentioned cooperation will adhere to the standpoint of "Wilderness Guardian" and propose the most favorable plan for "environment and landlord" according to the conditions of the field. The use of the land can satisfy the "friendly environment, sheltered species, environmental education promotion, and sustainable use". The most important thing is to avoid the land been turned into an unfriendly one due to "other incentives".

Our organization is about to enter its 23rd year. In addition to making great progress in acquiring land and long-term entrusted land to achieve land management rights, we will continue to care for and protect more than 72 habitats in the whole Taiwan. We expect to see more people willing to entrust the land to our organization, retain more pure lands for future generations and living creatures, and learn and inherit the mystery and wisdom of the land.

# Purchase of land protection, No. I land of the Society of Wilderness

On February 28 2018, we officially obtained the first directly owned land and unveiled the ceremony on June 30, announcing our formal acceptance of land donation and management of wilderness. This land; situated in the Yilan area, has been surveyed several times since its holding. A total of 131 families and 271 species of creatures have been inhabited in this area, including osprey, crested serpent-eagle, the pangolin and so on.

Entrusted land protection at Tianliao Kaohsiung

Zheng Yuqin, a member of the organization; whose nature name is Fir, has joined the Parent-Child Group since nine and seen the determination of our organization in protecting the ecology ever since. Therefore, in 2017, the ancestral farmland inhered from Grandpa will be commissioned by our organization for up to 20 years. The farmland is located in Tianyu District, Kaohsiung City, with an area of about 2446 square meters. It is currently managed by our Kaohsiung Branch. The initial record is about natural succession, which coupled with annual ecological surveys to accumulate valuable data. The first species survey was completed in April 2018 and there were about 43 species of plants, six species of insects and one specie of spider in the field.

# Leased land for conservation, 52-jia Wetland

The importance of this wetland is of national-level, 80% of which is private land. Our organization has protected the habitat through friendly farming and environmental education activities. The area of friendly farming has expanded from 4,365 sq. meters last year to 10,573 sq. meters this year. 25 promotional events were held which includes 13 natural experiences and 12 working holidays, with a total of 660 participants.

A volunteer training course was held with 21 participants. 16 sessions of surveys for birds and aquatic plants were conducted with 98 participants. We will continue to invest in manpower and resources to protect this waterfowl winter hotel.

# Land planning: Assist landlords in planning vacant lands towards a friendly environment

In land planning consultation, we have assisted many landlords in consulting, offered recommendations, informed them of related regulations and also suggested the most beneficial proposals for ecology and community. Among them, the most extensive is the planning assessment of 37 hectares of land in Wulai Mountain. In addition, there are many private- or cooperate-owned lands and farms, and idle land in the suburbs.

The process of cooperation has also been acknowledged by the landlord: "Any land use is not just a matter of assessing how much money is needed and whether it can be profitable." The word "land development" has never been simply meant to "build a house with additional facilities". But after assessing his own advantages, taking into account the environmental load, we will develop a way with local characteristics and be able to co-exist and co-prosper with the local communities in order to make the correct use and implementation a sustainable management.

# Synchronous ecological survey of Taiwan, Earth Day Synchronous Natural Observation in 2018

This year, there are 436 participants joined the Synchronous Natural Observation at 40 habitats and obtained 6,878 data on the Earth Day. With a slight increase of collected data; however, the number of participants and the number of habitats did not increase significantly. An autumn (October) Synchronous Natural Observation activity was added this year to double the frequency of investigation, and the easy-to-use iNaturalist system was introduced to greatly simplify the time of data input. The system is ideal for identification and personal data statistics; it can be regarded as a worldwide simultaneous survey activity, so that people around the world can see the beauty of Taiwan.

### Invasive species control

Invasive species continue to affect the diversity of local creatures and force indigenous creatures to face the pressure of survival. Since May, our organization has arranged 30 finvasive species removal activities at Wugu wetland, 52-jia wetland, Hsinchu Hejiayuan, Gaomei Wetland, etc., with a total of 505 participants. Such removal activities targeted Mile-a-minute Weed, Anolis sagrei, Water hyacinth, Apple snail, Santa-Maria, and in the meantime participants understand the importance of habitat protection.

# Invasive species control for Egyptian glossy ibis

The Egyptian glossy ibis overflowed in 1984. So far, except for Nantou, Hualien and Taitung counties, they are found throughout Taiwan and much like "Fushou Snail, American Crawfish, Tilapia...", soon they will cause major impact for local ecology.

According to the "Invasive Bird Species of Egyptian glossy ibis in 2016 - Administration's Conservation Research Series 105-04", the total number of which has reached 2,000 this year; it is confirmed that about 500 pieces are based at Wugu area with nesting behaviors. We immediately invited the competent authorities and the media to the scene to understand and discuss countermeasures, and the academic units removed bird eggs (about 255). As a result of this cooperation, the hatching rate of such bird is 0%. The competent authority will budget training program for such control plan.

# Species conservation, Hsinchu Dashanbei frog protection action

Hsinchu Dashanbei has been conducting ecological surveys and organizing frog crossings on a regular basis for ten years, successfully reducing the number of "road kills" of the red frog. Over the past years, more than 6,000 people have participated in the actual protection of frogs and 673 people this year, and 876 frogs were helped cross the road safely. The concept of community unity for maintenance is established with substantial result for local ecological environment and the protection of the red frogs. In the future, more effective programs will be developed to help communities integrate ecotourism with community development. In addition to creating community characteristics, the natural environment of the region will be preserved.

# Species Rehabilitation: Hsinchu Lotus Temple Wetland Insectivore Plant Conservation

There are four kinds of carnivorous plants such as long-leaved sundew, broad-leaf felt and moss, and three rare associated plants such as onion and peach grass in the lotus temple wetland. This year, the number of priority breeding species has grown steadily except for long-distance boring grass, but the problem of landification continues. Therefore, we continued to weed manually and excavate water channels in winter to expand the wetland area. The seed conservation test was carried out at Yoluotian demonstration area to build a carnivorous plant re-cultivation test area. Preliminary results (small felt moss) have been obtained, but the damages caused by the blessing snails need further studies.

Till October of 2018, there were 408 person-times at the Lotus Temple and Yoluotian working holiday. A total of 758 person-times has participated the lotus pond wetland guided-



and-lectured tour. A total of 40 locations have been identified with insectivorous plants in Taiwan, and I4 species of Drosera were recorded. Among them, the scutellaria chinensis grown in the Huadong area is even a new record published in 2017.

# Ecological survey plan for four-spot Mortonagrion Hirosei conservation

With the grant from

the third "Green Award", we will start a year-long project for the conservation of four-spot Mortonagrion Hirosei in 2019. The content includes: I. Census of four-spot Mortonagrion Hirosei in the Danshui River Basin (from Wazaiway wetlands to the Dahanxi and Xindianxi intersections). 2. Survey of grassland data in the estuary of the Taiwan. 3. Hold conservation seminars, expert seminars, survey workshops, and observation classes to promote public awareness of the four-spot Mortonagrion Hirosei. It is hoped that the four-spot Mortonagrion Hirosei will be categorized in conservation list.

Our vision is to use this long-term four-spot Mortonagrion Hirosei conservation work as a starting pointr to promote the Daisui river basin wetland from the "national important wetland" to the "international important wetland"

# Habitat restoration: a promise land for migratory birds

The Wugu wetlands are located at the northern end of the Erchong Floodway. The rich wetland ecology caused by the tides also attracts many waterfowl to winter. However, due to the increase of population, Danshui River Basin, the muddy areas which were originally available for waterfowls have reduced, and water birds face the dilemma of survival.

In order to increase the muddy areas where the waterfowl can feed, we've worked with New Taipei City authority at the Wugu wetlands since 2017. After more than a year of layout adjustment, it has been successfully attracted a variety of waterfowls.

Although the current results are remarkable, there is still a lot of room for attracting more creatures. Therefore; in addition to continuing to "adopt" ecological parks, a more effective "habitat management mechanism" still needs to be developed to attract more water birds.

In the future, we expect to transform them into "international wetlands" and offer a different living experience to the people and preserve a good environments for generations.



# Deep-rooted, "Wilderness nature center" guarded by heart

Teacher Zhou Ru (2000) of National Taiwan Normal University (NTNU), once summed up the four basic elements of a "Nature Center": "Activity plan, Facilities, People and Operation management". It seems that we already have the first three items, except for the "Facilities". By definition, it must have a physical structure such as houses, classrooms, commentary facilities, people's livelihood facilities, environmental facilities, etc. This argument shows that our organization was lack of such element in the early stage, but it is actually a different development strategy.

In terms of environmental education promotion, our organization has already set up "hot-spot" teams in various places to carry out non-entity education and guardianship operations. The reason why it can grow faster than an "entity-based" center is precisely because it is not limited to "physical structure".

Whether it is an "entity or non-entity" center is just an option. The requirements should be evaluated after the demand is selected. If there is a demand, our organization may set up an entity center directly at the adopted field. The following is a summary of the results of each center.

# Taipei Wanli Wetland Education Center

This year, it was renamed as "Wanli Wetland Education Center". Mr. Chen Dehong (director) and volunteers have been sheltering native aquatic plants for years and maintaining the park together with pleasures. Statistics show more than 10 events were held with about 225 participants this year. With funding from sponsoring company, we were able to repair the "wind-and-rain classroom".

The census of asylum species shows that the center has sheltered at least 130 species of aquatic plants in 49 families, including 7 species endemic to Taiwan (Taiwan Quillwort, Kusano Willow, Water Willow, Yellow Water Lily, Ludwigia taiwanensis, Da-Ann Hygrophila, Common Water-hawthorn). Other species, although not endemic, have become rare species due to human intervention such as land development and herbicides. It is expected that the wetland ecology of Taiwan will last forever under the efforts of this Center.

# Taipei Wugu Wetland Ecological Park

In addition to various guided tours and large-scale events, we also schedule-patrol this I70-hectare park and inform any wrong-doings to authorities. In terms of educational activities, especially in August, the "Summer Swallow Season" attracted a large number of people and enterprises, with a total of 2,314 registered participants.

In terms of habitat work, waterbird beach construction, removal of exotic species, investigation and monitoring are continued. This year, the Taipei City Bat Conservation Society was invited to set up a Bat House and use the voiceprint records to identify the bat species in the park.

In terms of corporate cooperation, the hardware and equipment were improved with the support of MSI Technology, and the monotonous teaching outdoor wall was presented to the public in a new look, which was more conducive to the promotion of the online community. The park will continue to develop towards the "nature center" model, allowing more people to recognize the wilderness concept and protect it together.

# Hsinchu Yuruotien Friendly Farming Center

The scale of the center is 4 points for paddy fields and 3 points for dry fields, and other experiments are carried out in an acre field. Volunteer training is to open a "vegetable dish class" to support the operation of the center and open the youth to work and change accommodation. In addition, 8 families are recruited to plant yam and Luoshen.

Since it has been cultivated for five consecutive years, 584 species of 214 species of



organisms (57 species of endemic species and 6 species of conservation species) have been investigated. The biological phase is significantly higher than that of agricultural land that is customary in farming, and it was also awarded the Ministry of Economic Affairs in 2017. The "Water Conservation Fund" was selected as the "Water Source Conservation Environmental Trust Pilot Base".

In the issue of the initiative, the Chemicals Bureau cooperated with the Chemical Welfare Bureau to promote the "Herbicide Management Regulations Act" and completed 20 lectures and exposures in Taiwan. In addition, the Hsinchu County Cultural Bureau held the "Slow Life Festival" and the public viewing PeoPo held a citizen journalist " 端 增 ", in addition to completing 9 films (2 in public), and USR project with National Tsing Hua University (University Social responsibility), attracting more than 160 participants.

In addition to continuing to work hard, the Center also expects outside support and assistance. It is expected to make up for the lack of manpower of the project and expand its effectiveness. This "dreamland" that promotes coexistence and coexistence with nature can continue to bring positive to people and the environment. power.

# Kaohsiung Naamaxiawudong Nature Classroom

I just wanted to give my child a chance to sleep under the company of fireflies, so I started the "Wudong Natural Classroom Collaborative House Project" in Maya, Naamasha District, Kaohsiung. Since 2008, I have entered the first place. In the past II years, after Typhoon-Morakot-caused flood and countless typhoons, the main structure has been completed in the midst of the change of the project. This year, it has entered the stage of internal painting. It depends on everyone's input so that the classroom is about to reach the stage of completion. In one year, we will have more investment in manpower and resources to complete the "Building Project" together.

For five consecutive years, I completed the "rough embryo" of the classroom wall by experiencing a simple life. In addition to the activities of the volunteer group, the company also cooperated with the local "Namaxia junior high school" for the "Life Education Course" for the sixth year.

Success has no other way, only one step at a time, although the speed may be slower, but the process is a precious experience of hands-on learning and experience. When the hardware

installation is completed, we will use it as a starting point to expand the benefits, lead the people to contact nature and learn in nature, and then protect the natural wilderness.

Hualien Mata Saddle Wetland Education Center

The center was established in 2010, and the people who recognize the wilderness concept provide the field free of charge for the promotion of the education. In addition to various educational explanations, study and volunteer visits, the school is mainly based on the national small school of the school, promoting the "Environmental Education for Children in the Area", leading the students to conduct interviews and outdoor experience, so that the children can understand the Ami. The dependence relationship with the wetlands, the implementation of the local cultural heritage and the establishment of environmental protection concepts.

Although the volunteer training and working days were suspended for any reason, the "Children's Long-Term - Wilderness Primary School" and "Summer Children's Camp" sponsored by the "Summer Star Natural Art Charity Foundation" accompanied 45 people. The schoolchildren explore the "story of water" and the mystery of the wetland ecology.

In terms of habitat construction, the Center demonstrates the use of diverse waterfront vegetation, and hopes to break the myth of the cement embankment, allowing people to reconnect with the environmental ecology, further thinking about how the economy and ecology are adapted and applied, and towards the common perseverance between man and nature. The goal is to move forward.

# **Yilan Shuanglian Environmental Education Base**

This Council paid attention to the long time of the Shuanglian Wetland. In the later period, it was put into rescue operation. Even in 2000, it was stationed in the "Shuanglianyi Ecological Classroom". It has been working on environmental education, ecological rehabilitation and friendly farming, and called on everyone to cherish it. The native land guards this water grass paradise that is close at hand.

Reviewing the results of this year, we handled 26 habitat activities to improve habitats and remove exotic species. Under the efforts of everyone, the species that have disappeared for more than ten years have finally recovered. The results were published at the International Wetlands Conference and were recognized by academic institutions. In the aspect of cultivating civic scientists, volunteers are invited to participate in ecological monitoring and investigation, leaving important basic information for Shuanglian.

In the area of education, 198 events were organized and about 6,706 visits were made. The project activity completed a five-step ecological battalion, including 210 people serving the socially vulnerable battalion.

In the promotion of friendly farming, there are 7 points in the friendly area, helping the farmers to gradually transform into friendly land in the form of community support, and also organizing field healing and food and agriculture courses to promote the ideal of facing the rural areas of the Lianlian area. Step forward.



# Be a die-hard old dog

The founding director Xu Renxiu often quoted one Chinese saying: "It is difficult to teach the old dogs new tricks! Therefore, I will teach the puppies instead!" This is the origin of our Children Education, although a bit sarcastic, yet it is one of the most pragmatic and fundamentally promotional strategies of an NPO; which is very true when environmental awareness was at its beginning.

During the early stage of our organization, the Secretary-General Li Weiwen told a story of "a fool eats steamed buns" to encourage everyone. Spreading the concept of environmental protection is like a fool eating steamed buns; no one knows till which bun will the fool feels stuffed. However, everyone is trying his best to be the last bun (successful idea spreading) while buns are been fed one by one... Although an old dog can't be taught for new tricks, there are still a group of die-hard ones during the early stage of environmental awareness.

In 2010, Taiwan Environmental Education Law was officially announced and implemented. Certified environmental education facilities and places are not limited to publicly- or privately-owned; even recreational areas and leisure farms can be certified. Will such a decree popularize environmental education or deuterated its quality? We assume that regardless of its impact; we shall focus on those who can not be benefited from good environmental education. Yes! Not only does this group of die-hard old dogs refuse give up, but also actively extend their reach in an era when environmental awareness grows.

Parent-child education has become a trend in recent years and has gradually become our fastest growing volunteer group. The most common words in the group are: "We join this organization for our children because they have one childhood; and we stay because we have only one middle-aged life!" Thanks to those puppies, they bring in so many die-hard old dogs!

In 2012, in cooperation with the Green Energy Institute of the Industrial Technology Research Institute, the six energy-saving methods for everyday life and the "Green Living Map" were combined to develop the concept of "energy-saving green living map workshop". To introduce the energy-saving techniques, through natural, vivid and interesting teaching plans, community inspections, review of household water and electricity consumption, and energy consumption of home appliances, plotted on the "energy-saving green map", and finally suggested improvements were developed through discussions. Oh! The old dogs can develop new tricks and constantly affect more in this age of environmental protection.

The current director, Mrs. Liu Yuemei, is good at encouraging everyone by her story during training classes. It is the metaphor found in 36 Tung Blossoms after biological experiments. "Youth does not stay forever. How to elevate its value?" If you still have hope for your life; or if you are a die-hard old dog whether ready or not, you are welcome to join us!



# Let the seed of the guardian hope sprout from the heart

Our organization has long been committed to habitat protection and environmental education. We have always believed that change is not within reach. Through our will of protection and with the promotion of environmental education, the general public will be motivated to get close to nature and understand the environment of life. Only then can they voice for the nature and care about the environmental changes; and further believe that through change can save the environment from utter



destruction, to the purpose of "protection of habitat".

### **Environmental education**

Interpretation is the best way to know the environment, and the commentator is of course the best promoter. Various guided tours lead the public to feel the beauty of nature, the beauty of Taiwan's biodiversity, and to stand up in environmental protection. To actively proclaim the diversity of creatures and their environment; so that the public can have a deeper understanding of the necessity of guardianship. In 2018, a total of six commentator trainings were completed in Taiwan with a total of 178 newly certified members. Besides, environmental education, species surveys and records were continuously held in various locations throughout Taiwan.

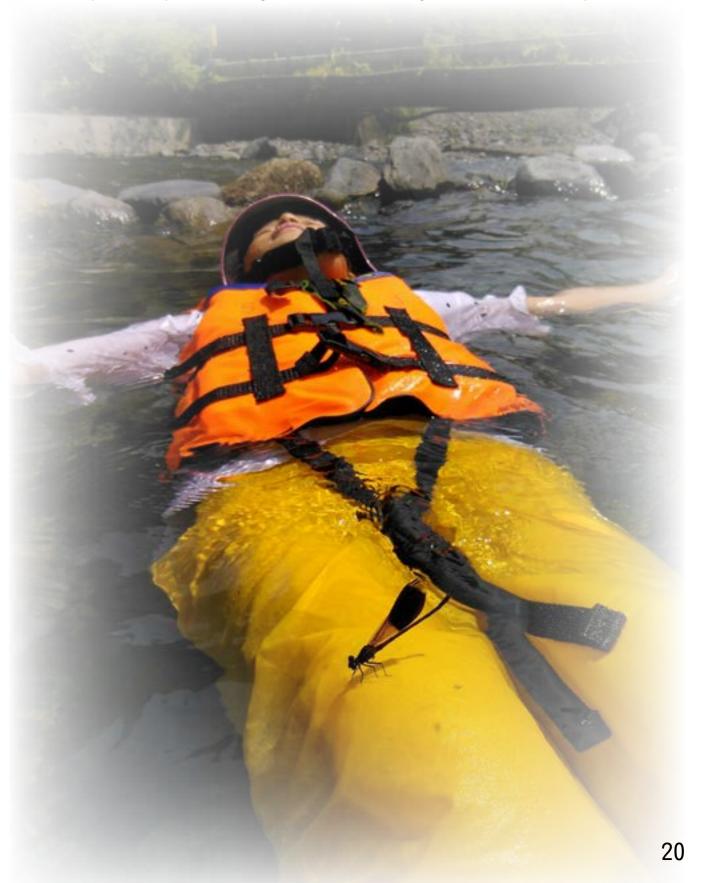
The commentator trainings enhances the participant's natural philosophy and natural observation ability, learns to share their experiences and observations, and then records and protects the land they live in. In 2018, the commentators handled 486 outdoor promotional activities with a total of participants. These activated the links between people and the land, and they also connected the feelings between the land and the people. Every commentator is a bridge between nature and people and has a strong faith to contribute him to the land. He also shares his feelings and we thanked them for their efforts.

### Promotion lecture: the sower who cherishes the nature

Many people still don't know that destroying the natural ecology is the same as destroying the basis for human existence. Therefore, through 90 minutes and hundreds of wonderful images, the promotion lecturer quickly led the audience to climb the mountains, dive into the

ocean, stroll through the forests and wetlands, appreciate the beauty of plants and animals, and discover the important relationship between nature and our lives.

Our promotion lecturers gave speeches everywhere with the these topics: The beauty of Taiwan's natural ecology, Re-visiting the ocean, Discover the beauty of the wetlands, Make friends with nature, Save energy, Carbon reduction and green life, Flip it! Climate change. They convey the beauty and mourning of Taiwan, and encourage the audience that everyone can take





actions in environment in their own lives and work.

The promotion lecturer has started regular training since 2007. So far, 74 training courses were held in various cities. In 2018, a total of 612 promotion speeches were conducted, affecting 57,701 listeners. We must continue to implant a seed that "cherishes nature" in every listener's mind. Although it may not play a role in the present; perhaps one day, this seed will grow, and he will become an important force to protect the environment.

### Children's environmental education in line with the world

After four years of efforts to promote the children's environmental education curriculum in Taipei, Taoyuan, and Yilan; the Children's Education Committee has entered the east coast in 2018 to complete the instructor (guide) training course, which enabled Hualien and Taitung to formally join the service. This year, a total of 376 lecturers conducted 219 curriculum courses in Taipei Metro, Taoyuan, Yilan, Hualien and Taitung, serving 32 schools and about 5,547 teachers and students. In this series of courses, the "Touch tree blind-folded" and "Investigate the Grassland Ecology" are among the most popular.

Our organization also cooperated with The Institute for Earth Education to camp course the "Earthkeepers program" in November this year. The Shunlianpei Environmental Education Center successfully completed the training and the establishment of the base. In summer, they also completed two three-day-two-night children's camps to serve 58 social welfare students in five schools in Taipei and Taoyuan.

The Wistron Humanities Foundation sponsored the Disadvantaged Children Project, the "Small Seeds in the Field" program, which was carried out by the Hsinchu Rolling Group and the Chiayi Flying Butterfly Group to complete 14 activities and serve 336 people. The Summer Star Natural Art Foundation sponsors the Children's Project in the remote area of Hualien, the "Local Natural Learner" program, which operates 32 events and serves 4,900 people. In the future, the existing volunteer service will continue, and the three-day-two-night Earth Keeper

Camp course will be launched to enable Taiwan and the world's children guard our precious earth together.

# Parent and children create a better future together

According to the classification of our Parent-Child Group, there are 13 complex groups and 14 more under development. Altogether, there are about 1,700 families with 3,300 children of different ages and 3,400 adults (including parents and volunteers) who conduct a one- or two-day group meeting once or twice every month.

Since June 2015, the Parent-Child Group has held the "Youth Environmental Action Forum" for the first time in the 6th National Grand Camp activity. The idea is to gradually constructed a "Global view; Local action" from this forum, the National Environmental Forum, and the World Environment Forum. The 2018 Environmental Action Forum is divided into

junior, youth and adult groups, which has become our annual event. Due to the fruitful results of the 2018 Environmental Action Forum, a national "Environmental Action Forum" will be held in the future, and it is expected that an international "Environmental Action Forum" will be established in 2019 to establish an international environmental action exchange platform to the international wilderness. The Alliance is moving forward, not only looking forward to assisting the children of the wilderness to stand on the world stage, but also to extend the influence of the Wilderness Protection Association to the world.



# Special workshop: special love for special you

For more than a decade, the Special Education Group (referred to as the Special Workshop) has handled 13 volunteer trainings at three branches. This group of enthusiastic and careful guides has developed different teaching classes for people of different disadvantages. Unexpected situations often occur on the spot, so the guides need to adjust immediately in order for the prospects to experience the nature tailored for them. Therefore, field survey, teaching aids and discussions are vital before any event. Valuable experiences are passed on and shared to the newly certified volunteers; thus the activities are successfully completed.

In 2018, 30 service sessions were completed under the efforts of the Taipei, Hsinchu and Taichung Special Education Group. About 404 volunteers participated and approximately 979 people were serviced. We hope that with the willingness and action of "special love for special you", we will lead more special friends into nature and help them feel the beauty of nature.



# Starting from life, the most pragmatic action for "climate change"

The three major promotional courses of the Climate Change Groups, "Climate Change Workshop on the Table", "Climate Change Workshop under the Shades" and "Energy Saving Green Living Workshop" have taken roots. They have completed the fifth Climate Change Volunteer Training and the third Energy-Saving Volunteer Training in 2018; then moved on to Chiayi, Tainan and Taitung; and further extended to four counties to cooperate with local government and communities.

Volunteers in Taipei also cooperated with the Taipei Family Care Foundation and enterprises twice to blend the concept of climate change into social welfare and enterprises. During the time of energy transformation, they continue to participate in the discussion related to energy transformation and the evaluation of energy policies in local governments, and establish interaction and connection with other environmental NGOs. This year, in conjunction with the ITRI's "Community Energy Conservation Volunteer Training and Promotion Project", we stepped out to assist volunteers of other organizations and made them our partners.

In addition to continuing to strengthen our cohesiveness and care for climate change and energy issues, the volunteer groups of each branch will support and assist one another as a tree connected to each root, and cooperate with the establishment of the organizational system to make the climate change team play a more important role. END

