

**Advisory Council on the Environment
Nature Conservation Subcommittee**

Progress of Pilot Conservation Management Agreement Projects

Purpose

This paper briefs Members of the progress of the three pilot conservation management agreement (MA) projects funded by the Environment and Conservation Fund (ECF).

Background

2. At the meeting of 1 September 2005, the Subcommittee recommended support for four applications received under the Pilot MA Scheme. The Subcommittee's recommendation was endorsed by the Advisory Council on the Environment on 12 September 2005. Subsequently, one of the applicants withdrew the application in respect of the land located at Ramsar Site and Deep Bay Wetland outside Ramsar Site. On 6 October 2005, the ECF Committee approved the remaining three projects with details as follows –

Project Title	Proponent	Approved Grant
A Pilot Scheme of Management Agreement on the Private Land with High Conservation Value at Fung Yuen Valley in Tai Po, Hong Kong	Tai Po Environmental Association (TPEA)	\$1,743,630
Birds and Humans in Harmony – A Sustainable Management Scheme in Long Valley	Hong Kong Bird Watching Society (HKBWS)	\$1,362,560
Sustainable Habitat Management in Long Valley	Conservancy Association (CA)	\$1,514,160
	Total:	\$4,620,350

Progress

3. TPEA and CA commenced their respective projects on 1 November 2005, while HKBWS commenced its project on 1 December 2005. The Agriculture, Fisheries and Conservation Department (AFCD) and the Environmental Protection Department are now actively monitoring the implementation of the projects, including vetting of progress report and attending meetings of the relevant advisory /management committees.

4. Progress of the three projects are summarised at **Annexes 1 to 3** respectively.

Advice Sought

5. Members are invited to note the progress of the three pilot conservation MA projects.

Agriculture, Fisheries and Conservation Department
Environmental Protection Department
June 2006

**A Pilot Scheme of Management Agreement on the Private Land with High Conservation Value at Fung Yuen Valley in Tai Po, Hong Kong
(Tai Po Environmental Association)**

Progress Summary

1. Site safeguard and Ecological Monitoring Program

- Owners of private lots in Fung Yuen SSSI were identified, and had reached rental agreements with TPEA. A total area of about 174,000 ft² of private land joined the pilot MA project.
- Patrol is being carried out daily to inspect and monitor the managed area as well as Fung Yuen village and SSSI as a whole. Apart from occasional bush fire and war-game, damaged butterfly food plants, which might be caused by illegal butterfly larva capturing, were also identified.
- Two independent bird surveys were carried out by the Hong Kong Bird Watching Society in December 2005 and April 2006.

2. Habitat Management Program

- Butterfly larval food plants and nectar plants have been cultivated in the reserve. Ditches and fences were dug and set up to provide suitable habitat for the plants. Phase one of the reserve has been established. More larval food plants and fruit trees will be planted in other new areas.
- Butterfly nursery facilities have been set up. Larval that face immediate danger would be put in the nursery facilities for care. So far, eighteen of such larval have been put in the nursery facilities.
- Weekly habitat management volunteer program is being carried out every Sunday morning.

3. Species Conservation Program

- Four independent butterfly surveys were carried out by the Hong Kong Lepidopterists' Society and assisted by the Department of Biology, Chinese University of Hong Kong from January to April 2006.

4. Consultation / Community Development / Conservational Education and Publicity Program

- As at April 2006, a total of 18 workshops (attended by 650 participants) have been arranged. About 83% of the participants were students.
- Educational and publicity materials (such as leaflet, butterfly identification card, worksheet for workshops) have been produced.
- Website on the pilot MA project has been set up for public viewing (www.fungyuen.org).

Tai Po Environmental Association
June 2006

**Birds and Humans in Harmony – A Sustainable Management Scheme
in Long Valley (Hong Kong Bird Watching Society)**

Progress Summary

1. Habitat Creation and Maintenance

We are currently cooperating with seven farmers to maintain four types of habitats. The programme on wet agricultural land is under negotiation. The details are set out in the table below -

Management Measures	Proposed Size (sq. ft.)	Operating Size (sq. ft.)
Fellow Wet Agricultural Land	30,000	55,000
Active Wet Agricultural Land	10,000	23,500
Dry Agricultural Land	20,000	20,000
Farmland Margin Vegetation	250,000	171,000
Wet Agricultural Land for Autumn Migration	50,000	In preparation

Fellow Wet Agricultural Land (managed as Shallow Water Habitat)

We have an active vegetation management plan on farmlands that are targeted for freshwater birds. Specifically, old water Spinach and weeds were cleared regularly while some grasses and herbaceous plants were allowed to remain. Water level was maintained between 2.5-5cm.

Active Wet Agricultural Land

This plan aims at growing more specialised plants and testing their effect on birds. Two pieces of farmlands were used for growing Water Chestnut. The land was flooded with water and water level was maintained at around 5cm. At the same time, in a small piece of land adjacent to it, Water Chestnut seeds were germinated. Some germinated Water Chestnut has also been transplanted to farmlands. In addition, we plan to grow rice in July and Chinese Arrow-head in August.

Dry Agricultural Land

The Chinese Flowering Cabbages was planted. The crops flowered in April and produced seeds in May. The seeds were intentionally not harvested to attract birds. The second round of crops will be planted in June.

Farmland Margin Vegetation

The plan is to improve the plants for birds in Long Valley with the use of farmland margin vegetation. We have started working on the farmland margins in late April. Some target plant species such as Tomato were selected. Planting has been started and some were completed already.

Wet Agricultural Land for Autumn Migration

We are in the process of finding suitable farmlands and communicating with local farmers. We foresee no particular difficulties in this part.

2. Vegetation Management Plan

Vegetation Working Group with specialists was set up to assist in the preparation of Vegetation Management Plan and advise on habitat management. With reference to the Vegetation Management Plan, many of the species were planted accordingly. Tomato and several herbaceous species were planted on farmland margins. Water Chestnuts were germinated successfully and will be transplanted to farmlands. Chinese Flowering Cabbages were left over grown in the farmlands for attracting birds. However, we encountered some problems such as sourcing particular species (e.g. 鹹水草). Because of this, we have missed the optimal time for planting certain crops.

3. Bird Monitoring Scheme

Bird surveys are being conducted once every week. Bird species and numbers as well as the vegetation condition of farmlands are recorded. Water level of farmlands was also recorded during each survey. In the past six months, 85 species of bird were recorded in Long Valley, including

some scarce species such as Japanese Yellow Bunting (*Emberiza sulphurata*, globally vulnerable species), Purple-backed Starling (*Sturnus sturninus*, rare in spring), Eurasian Skylark (*Alauda arvensis*) and Baillon's Crake (*Porzana pusilla*). Greater Painted Snipe (*Rostratula benghalensis*) was found breeding and adult with chick was seen on 18 May 2006. The most interesting one is a Rosy Pipit seen for first time in Hong Kong between 14 and 17 May 2006.

4. Volunteer Team / Site Support Group

A Long Valley Support Group has been set up to foster public participation in this project. The group is a team of volunteers supporting the conservation in Long Valley. Besides HKBWS members, general public will also be recruited. Activities such as site visits and management works such as the removal of weeds will be arranged for the volunteer team regularly.

5. Summary

The Long Valley project has been going mostly on schedule and within target. Some earlier difficulties have been solved. From the bird survey, there are already encouraging signs that our habitat management are producing positive effect on the birds. In the coming months, we expect to see more good signs.

Hong Kong Bird Watching Society
June 2006

**Sustainable Habitat Management in Long Valley
(The Conservancy Association)**

Progress Summary

1. Agreement engagement

So far, seven agreements have been reached with a total area of 125,500 ft² of farmlands in Long Valley with five farmers (Table 1). More abandoned farmlands have been identified and are under negotiation for management. Agreements engagement continued in the second and third quarters resulting in a higher participation rate of this project by farmers.

Table 1 Summary of habitat management progress

Management measures	Proposed Size (sq. ft.)	Operating Size (sq. ft.)
Habitat deterioration prevention measures	200,000	89,000
Habitat diversity enhancement measures	12,000	21,500
Active conservation works – Resumption of wet agriculture	10,000	10,000
Active conservation works – Restoration of marshes	16,000	5,000

2. Implementing agreements

All farmers engaged with the agreements are required to keep farming activity records and purchase receipts. By tracking records, site visits and conversations with farmers, CA can monitor the progress of the agreement implementation. At the inception of the agreement period, our staff visited farmers every week to ensure that they fully understood and implemented the management works appropriately. All management works are on progress. Mikania removal works will be also organized on 11th June 2006 to clear up 28,000 ft² of Mikania on abandoned farmlands.

3. Monitoring Habitat & Biodiversity

- a. Habitat Survey: The second agricultural habitat survey was finished in February 2006 to monitor habitat changes in Long Valley.

- b. Food Web Study: Preliminary analysis started in March 2006. The sampling sites are distributed over the farmlands in Long Valley, including areas managed by the Hong Kong Bird Watching Society (HKBWS). Water sampling for nutrient and Biological Oxygen Demand analysis, and invertebrate sampling were completed in March 2006. Laboratory analysis work is in progress. Bird counting started on 11 March 2006. Bird data was also provided by HKBWS for bird diversity monitoring.

The Conservancy Association
June 2006