FRASER'S HILL NATURE PROJECTS:

GENERAL MEASURES FOR IMPLEMENTATION

A report submitted to the
Perbadanan Kemajuan Bukit Fraser

by

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SUMMARY OF RECOMMENDATIONS

A summary of the main action recommendations is as follows:

Recreational Forest

ACTION 1:
THE OBJECTIVES OUTLINED IN THE RECREATIONAL FOREST PROPOSAL SHOULD BE TRANSLATED INTO ACTION FOR IMPLEMENTATION, TAKING INTO consideration THE WWFM RECOMMENDATIONS OUTLINED BELOW.

ACTION 2:
THE CHOICE OF SITE SHOULD BE REVIEWED AND, AS FAR AS POSSIBLE, INCORPORATE SAFETY AND ECOLOGICAL CHARACTERISTICS.

ACTION 3:
PKBF'S CONCEPT IS SOUND AND IT WOULD DO WELL TO SET UP THE INFRASTRUCTURE ALONG A SYSTEM OF TRAILS.

ACTION 4:
INTRODUCTION OF DOMESTICATED ANIMALS INTO THE RECREATIONAL FOREST SHOULD BE CAUTIONED AS IT MAY UPSET THE ECOLOGICAL BALANCE OF THE AREA.

ACTION 5:
WWFM RECOMMENDS THAT THE ENTRY POINT INTO THE RECREATIONAL FOREST BE EQUIPPED WITH A HUT OR INFORMATION BOARD WHICH WOULD PROVIDE ALL THE RELEVANT INFORMATION.

ACTION 6:
PKBF SHOULD IDENTIFY SPECIFIC CHILDREN AGE GROUPS AND THE APPROPRIATE ACTIVITIES SHOULD BE DRAWN UP FOR EACH GROUP.
ACTION 7:
PKBF SHOULD APPROACH WWFM, FRIM, MNS AND KEMENTERIAN PELAJARAN FOR RESOURCE MATERIAL AND POSSIBLE IDEAS ON ACTIVITIES FOR CHILDREN.

ACTION 8:
WWFM RECOMMENDS THAT A SYSTEM OF TRAILS SPECIFICALLY DESIGNED FOR THE CHILDREN AGE GROUPS BE SET OUT AND MARKED CLEARLY ON THE GROUND.

Bird Park

ACTION 9:
PKBF SHOULD SEEK THE COOPERATION OF TDC, TRAVEL AGENCIES AND FOREIGN BIRD CLUBS TO PROMOTE FRASER'S HILL AS A BIRD SANCTUARY.

ACTION 10:
PKBF SHOULD SEEK ASSISTANCE FROM THE MNS BIRD GROUP TO IDENTIFY AREAS WHERE BIRDS ARE ABUNDANT AND EASY TO SIGHT. BIRD TRAILS SHOULD BE SET UP ALONG THESE ROUTES.

ACTION 11:
BIRD HIDES SHOULD BE SET UP ALONG THE IDENTIFIED BIRD TRAILS.

ACTION 12:
WWFM WILL HELP TO PREPARE A LIST OF TREES WHICH WOULD ATTRACT BIRDS TO THEM.

ACTION 13:
PKBF SHOULD REFRAIN FROM PLANTING ANY EXOTIC TREE SPECIES.
ACTION 14:
PKBF SHOULD CONSIDER CAREFULLY THE IMPLICATIONS AND FACTORS INVOLVED IN CAGING BIRDS.

ACTION 15:
PKBF MUST MAINTAIN STRICT CONTROL ON ALL DEVELOPMENT IN FRASER'S HILL TO PREVENT ANY FRAGMENTATION OF THE FOREST.

ACTION 16:
The MNS Bird Group should be approached for assistance on guided tours for amateurs.

ACTION 17:
PKBF should invite sponsorship to enable them to provide ancillary equipment for sale or hire to amateur bird watchers.

Nature Trails

ACTION 18:
PKBF should continue to organise events like the Bird Race to attract publicity at national and international level.

ACTION 19:
General improvement and regular maintenance of the existing trails in Fraser's Hill will be required.

ACTION 20:
The trails should be marked and graded according to their distances, difficulty of their terrain, time taken to complete the trail, etc., and mapped out for visitors.
ACTION 21:
FRIM AND WWFM SHOULD BE INVITED TO HELP SET UP THE
EDUCATIONAL INTERPRETATION FOR THE TRAILS.

Visitor Centre cum Education and Interpretation Centre

ACTION 22:
THE VISITOR CENTRE SHOULD PROVIDE COMPREHENSIVE AND
UPDATED INFORMATION ON ALL ACTIVITIES IN FRASER'S HILL.
THE CENTRE SHOULD BE GIVEN MAXIMUM PUBLICITY.

ACTION 23:
PKBF SHOULD CONSIDER THE POSSIBILITY OF SETTING UP AN
EDUCATION AND INTERPRETATION UNIT WITHIN THE PARKS AND
RECREATION SECTION.

ACTION 24:
EVENING PROGRAMMES SHOULD BE ORGANISED FOR VISITORS.

Nature Guides

ACTION 25:
PKBF SHOULD TAKE THE NECESSARY STEPS TO EITHER TRAIN
INTERNAL GUIDES OR HAVE CONTRACTED GUIDES.
1. INTRODUCTION

1.1 Background

Fraser's Hill is one of the three hill resorts in Peninsular Malaysia, the other two being Genting Highlands and Cameron Highlands. Of these three, Fraser's Hill is the only resort which has had a rather passive approach to development. Perbadanan Kemajuan Bukit Fraser (PKBF) (which also acts as the local authority) has recently re-endorsed an overall theme in the development of Fraser's Hill as one of retaining and accentuating the natural beauty and preserving its natural character. World Wide Fund for Nature Malaysia (WWFM) is in consensus with the overall theme adopted by PKBF.

1.2 General Strategy for Promoting Nature Recreation in the Fraser's Hill Resort

PKBF is of the opinion that Fraser's Hill potential as a resort is underutilised by visitors. Visitors often complain of the lack of activities to keep them occupied on the Hill. WWFM suggests that a two pronged approach to ensure a more effective visitor participation in nature activity at Fraser's Hill.

(i) To enhance and provide a variety of nature activities for the visitor.

(ii) To encourage and promote visitor participation in these nature activities.

PKBF has already taken positive action towards the first measure by developing a number of proposals for nature
activity on the Hill (see Appendix 1, 2, 3). The proposed projects would help to increase the visitors' appreciation of the area, as well as provide an educationally stimulating experience to the visitor. However, such efforts would also require a dynamic approach in promoting visitors' participation in the activities proposed. Otherwise, the resources invested in developing the projects may not be worthwhile.

1.3 Aim of Report

This report is a follow-up of PKBF's request to WWFM for assistance to provide conservation input into the proposed nature projects. This report aims to provide:

(i) specific comments and recommendations on the proposed nature projects; and

(ii) measures which should be taken to encourage a more effective participation in nature activity at Fraser's Hill.

The recommendations listed below are action oriented and, as far as is possible, they identify agencies which could be consulted for further input, advice or resource material.
2 WWFM'S COMMENTS ON THE PROPOSED NATURE PROJECTS IN FRASER'S HILL

2.1 General

Fraser's Hill is an environmentally sensitive area because of its elevation (above 1000m asl) and its unique flora and fauna. The steep slopes within the hill area place a constraint on any large scale development. Although the proposed nature activities are not likely to require any such clearance, the development carried out must be ecologically sound and compatible with the natural surrounding of the area.

2.2 Visitor Information

In 1985, the total visitors to Fraser's Hill was estimated at 130,000. The peak periods coincide with the school holidays in Malaysia and Singapore (during the months of April, August, November and December), and the fortnight between Christmas and early January. These trends suggest that many of the visitors are families with school-going children. In general, the visitors are those who are attracted to the natural, relatively undisturbed setting of Fraser's. These are some of the factors that must be borne in mind when planning any activity or development at Fraser's Hill.

2.3 Recreational Forest

The PKBF proposal for the recreational forest in Fraser's Hill is in Appendix 1.
2.3.1 Objectives and Background of the Recreational Forest

The objectives of the recreational forest are sound and WWFM is agreeable to the general theme outlined in the proposal.

**ACTION 1:**
THE OBJECTIVES OUTLINED IN THE RECREATIONAL FOREST PROPOSAL SHOULD BE TRANSLATED INTO ACTION FOR IMPLEMENTATION, TAKING INTO CONSIDERATION THE WWFM RECOMMENDATIONS OUTLINED BELOW.

2.3.2 Site Selection

The six acre site which has been identified by PKBF was visited by the WWFM team. Our main reservation here is the sharp drop from the access road to the proposed site (a valley), which is a dangerous feature, especially since the intended facility is to cater for school children. If the site is to be retained, specific action (such as the construction of iron railings along the edge and gentle steps to the valley floor) should be undertaken.

Characteristics for a potential site should include:

(i) safety features in terms of terrain, slope etc. An important aspect for safety is that the entry point should be through the valley floor. The more difficult and steeper terrain could be at the further end from the entry point;

(ii) reasonably sized valley floor to allow for sufficient area for development of children's activity; and
(iii) ecologically varied and interesting features e.g. water body or stream, variable tree structure etc.

ACTION 2:
THE CHOICE OF SITE SHOULD BE REVIEWED AND, AS FAR AS POSSIBLE, INCORPORATE SAFETY AND ECOLOGICAL CHARACTERISTICS.

2.3.3 Concept of the Recreational Forest

The concept of the recreational forest focuses on the infrastructure to be set up within the selected site (see Appendix 1). Generally, the concept proposed is acceptable. It is recommended that all sign-boards, bridges etc., should follow a system of activity trails as described below (# 2.3.4 (c)) However, the suggestion to introduce domesticated animals into the fenced area of the recreational forest should be carried out with caution so as to avoid any major disturbance to the ecological balance of the area. Any introduction of a species into the area could cause displacement of an existing species. Furthermore, the newly introduced species may face problems.

ACTION 3:
PKB'S CONCEPT IS SOUND AND IT WOULD DO WELL TO SET UP THE INFRASTRUCTURE ALONG A SYSTEM OF TRAILS.

ACTION 4:
INTRODUCTION OF DOMESTICATED ANIMALS INTO THE RECREATIONAL FOREST SHOULD BE CAUTIONED AS IT MAY UPSET THE ECOLOGICAL BALANCE OF THE AREA.
2.3.4 Further Recommendations on the Recreational Forest by WWFM

(a) Entry Point

A shelter (wakaf) or hut and an information board with a map of the area and the activities contained therein should be provided at the entry point into the recreational forest. This would help visitors to orientate themselves to the area. It would also function as a meeting point, resting place or a briefing centre for large groups of visitors. It should also provide an area for young children activity.

ACTION 5:
WWFM RECOMMENDS THAT THE ENTRY POINT INTO THE RECREATIONAL FOREST BE EQUIPPED WITH A HUT OR INFORMATION BOARD WHICH WOULD PROVIDE ALL THE RELEVANT INFORMATION.

(b) Children Age Groups

The target visitor group to the recreational forest, as suggested in the background and objectives, are families and children (see Appendix 1). This being so, it is important that specific age groups of children be identified, so that appropriate activities for each group can be incorporated from the planning stage.

Suggested age groups, level of guidance required and possible activities is listed below.

(i) Age group: < 8 years

Type of guidance: Parental guidance.
Activity type: The children of this age tend to be highly energetic, but safety
is of major concern. The type of activities should be a blend of indoor and outdoor.

Examples of activity:
Example 1: Jigsaw of a forest profile (that can be seen from the window of the hut at the entry point) made of metal slabs, with magnets on the back, to be completed by the child. The completed picture should have direct semblance to the surrounding.
Example 2: Simple outdoor activities within the valley floor at the entry point.

(ii) Age group: 8 - 12 years

Type of guidance: Parental guidance or nature guides.

Activity type: Children in this age group tend to be very enthusiastic, but their interest is very transitory. They have the tendency to move from one object or activity to another. An enquiry approach should be used to illustrate features of the forest, and emphasis should be on outdoor activities.

Examples of activity: A worksheet should be drawn up and answers to these questions should require practical examination of parts of the forest e.g. ferns, pitcher plants etc. The questions should be
interesting and challenging. The worksheet should be related to a trail marked out for this age group. Information boards along the way could provide clues.

(iii) Age group: 12-16 years

Type of guidance: Nature guides.
Activity type: In this age group, the children are more adventurous and independent. These children have been exposed to the basic biological processes in the school curriculum. This is an important consideration in any activity planned for them.

Example of activity: Trekking along guided trails with information boards with questions to stir their interest. A simple nature hunt (in line with the treasure hunt concept) could be worked into the trail. A reward at the end of the trail such as a dip at a waterfall or a picnic by the river would provide further incentive to the children.

The activities planned for the 8-12 and 12-16 age groups should have a dual function: (a) to give practical value to what is learnt in the classroom; and (b) to help them understand better the concepts they may have learnt in the classroom. The activities set up for these age-groups could also be used as a field exercise for teachers and students from nearby schools.
ACTION 6:
PKBF SHOULD IDENTIFY SPECIFIC CHILDREN AGE GROUPS AND THE APPROPRIATE ACTIVITIES SHOULD BE DRAWN UP FOR EACH GROUP.

ACTION 7:
PKBF SHOULD APPROACH WWFM, FRIM, MNS AND KEMENTERIAN PELAJARAN FOR RESOURCE MATERIAL AND POSSIBLE IDEAS ON ACTIVITIES FOR CHILDREN.

(c) System of Trails

There should be a network of activity trails which starts and ends at the entry point, and graded for the different age-groups i.e. each trail could be marked out in different colours depending on the age group it caters for. These trails should be shown on the board, and clearly marked and maintained on the ground.

ACTION 8:
WWFM RECOMMENDS THAT A SYSTEM OF TRAILS SPECIFICALLY DESIGNED FOR THE CHILDREN AGE GROUPS BE SET OUT AND MARKED CLEARLY ON THE GROUND.

(d) Nature Guides

It is recommended that PKBF has a central core of trained nature guides who would work on a rotational basis (see #3.3).
2.4 Bird Park

The PKBF proposal for the bird park in Fraser's Hill is in Appendix 2.

2.4.1 General Considerations

Fraser's Hill has been a bird paradise for bird watchers since the 1950's. Records of birds, both local and migratory, have been compiled for the area since the 1940's by bird enthusiasts in the Malayan Nature Journal and the Malayan Naturalist.

This activity, however, has been carried out only by bird enthusiasts; conducted either by individuals or by members of a birdwatching group. For the amateur or novice, it is both difficult and frustrating to bird-watch alone. To encourage the growth in the activity, and to induce more people into it, the proper facilities and programmes have to be made available. The PKBF proposal for a bird park is a positive step in this direction, albeit requiring some further measures (#2.4.4).

2.4.2 Objectives and Background of the Bird Park

The sound objectives of the proposed bird park and the idea of promoting Fraser's Hill as a bird paradise of national and international standing are commendable (see Appendix 2). The British Bird Club already considers Fraser's Hill as a bird paradise of world standard. The bird park will serve to educate, as well as instil in, the visitors the importance of birds in the ecological framework. PKBF could liaise with the Tourist Development Corporation (TDC), travel agencies and foreign bird clubs to promote the park both locally and overseas.
ACTION 9:
PKBF SHOULD SEEK THE COOPERATION OF TDC, TRAVEL AGENCIES AND FOREIGN BIRD CLUBS TO PROMOTE FRASER'S HILL AS A BIRD SANCTUARY.

Specific comments on the objectives for the bird park include:

(a) Bird Trails and Information Boards

Designating a specific area as a bird site as suggested in the PKBF proposal, is misleading because the whole hill is a bird sanctuary. WWFEM suggests that PKBF seek the assistance of the MNS Bird Group to identify specific routes/trails where: (i) the birds are abundant; and (ii) which have good vantage points for bird watching. Examples of such areas include the Bishop's trail and the High Pines area. Information boards should be placed at key points along these routes to provide information and illustrations of bird species that can be spotted there. The boards should also highlight the code of conduct and dress during birdwatching.

ACTION 10:
PKBF SHOULD SEEK ASSISTANCE FROM THE MNS BIRD GROUP TO IDENTIFY AREAS WHERE BIRDS ARE ABUNDANT AND EASY TO SIGHT. BIRD TRAILS SHOULD BE SET UP ALONG THESE ROUTES.

(b) Bird Hides

Bird hides should be set-up along bird trails to provide hiding places for bird-watchers to view birds so as to minimise disturbance to the bird environment.
ACTION 11:
BIRD HIDES SHOULD BE SET UP ALONG THE IDENTIFIED BIRD TRAILS.

2.4.3 Concept of the Bird Park

WWFM would like to express its reservation towards the following concepts: (a) planting of berry trees, (b) introduction of exotic tree species; and (c) caging of birds.

(a) Planting of Berry Trees

The planting of berry trees may be carried out, but would best be restricted to the garden areas and around the visitor centre or rest houses. This would help to increase the bird density in areas where visitors can easily see them. WWFM could help to provide a list of other trees which would attract birds to them.

ACTION 12:
WWFM WILL HELP TO PREPARE A LIST OF TREES WHICH WOULD ATTRACT BIRDS TO THEM.

(b) Introduction of Exotic Tree Species

Planting of exotic trees and plants is not likely to achieve the desired result of attracting more migratory birds. Fraser's Hill already has a variety of trees which provide abundant food for birds. Migratory birds are well adjusted to the change in diet in the tropics, and do not necessarily rely on the same diet as in their temperate lands. Furthermore, planting of exotics may adversely
alter the natural balance of the area, especially if they are trees which propagate easily. This could have a detrimental effect on the existing bird population in Fraser's Hill.

ACTION 13:
PKBF SHOULD REFRAIN FROM PLANTING ANY EXOTIC TREE SPECIES.

(c) Caging of Birds

Caging birds for display in the park will attract objections from ardent bird lovers, and could well result in negative publicity, both locally and internationally. Although the aim of caging the birds for display is to stimulate the interests from the general visitors, it would be advisable for the idea to be aborted in the interest of Fraser's Hill reputation as a world reknowned bird site. The mini-zoo with its caged animals has not been successful or popular with the visitors. Hence, it would appear that the type of visitors to Fraser's Hill are more attracted by wildlife in its natural setting.

A further problem that could arise is the maintenance of these birds in cages. Several factors such as diet, health and disease of the birds must be looked after, and the services of a veterinarian may become indispensable.

ACTION 14:
PKBF SHOULD CONSIDER CAREFULLY THE IMPLICATIONS AND FACTORS INVOLVED IN CAGING BIRDS.
2.4.4 Further Recommendations on the Bird Park by WWFM

(a) Fragmentation of the Forest

One of the main reasons for the high population of birds at Fraser's Hill, both in terms of number and variety, has been the continuous belt of forests from the hill to the lowland areas. Any large scale clearance of forests for housing, condominium, golf courses, or major development projects, must ensure that it does not result in fragmentation of the forest. Fragmentation has the effect of causing breaks in the movement of birds from one area to another.

ACTION 15:
PKBF MUST MAINTAIN STRICT CONTROL ON ALL DEVELOPMENT IN FRASER'S HILL TO PREVENT ANY FRAGMENTATION OF THE FOREST.

(b) Guided Tours

PKBF could organise guided trips along the bird trails to introduce beginners and amateurs to bird-watching. The arrangement for guide services would work on a similar arrangement as for nature guides (#3.3). Bird tours could also be conducted in co-operation with the MNS Bird Group trips.

ACTION 16:
THE MNS BIRD GROUP SHOULD BE APPROACHED FOR ASSISTANCE ON GUIDED TOURS FOR AMATEURS.

(c) Ancillary Equipment

Ancillary equipment such as binoculars and Fraser's Hill birds reference sheet should be made available for sale
or hire to the amateur birders. For example PKBF could find sponsorship to produce a coloured, laminated (i.e. waterproof) sheet listing and illustrating the common birds of Fraser's. This could be sold at a nominal fee. PKBF could also hire binoculars to the amateur bird watchers during guided tours.

**ACTION 17:**

PKBF *SHOULD INVITE SPONSORSHIP TO ENABLE THEM TO PROVIDE ANCILLARY EQUIPMENT FOR SALE OR HIRE TO AMATEUR BIRD WATCHERS.*

(d) **Information Counter**

PKBF should set up a bird information counter at the Visitor Centre (#3.2). It should be able to provide information on:

(i) local and migratory bird species in Fraser's Hill;

(ii) the diversity of birds and the relationship with its habitat; and

(iii) the code of dressing and conduct during bird-watching.

(e) **Special 'Bird' Events**

PKBF should organise events such as the recent Bird Race (4th December 1988) and other formal and highly publicised events to attract participation at the national and international level.
ACTION 18:
PKBF SHOULD CONTINUE TO ORGANISE EVENTS LIKE THE BIRD RACE TO ATTRACT PUBLICITY AT NATIONAL AND INTERNATIONAL LEVEL.

2.5 Nature Trails

2.5.1 Objectives and Background of the Nature Trails

The main theme of the proposed nature trails is very sound. PKBF already has five existing trails. The main problems that are currently faced by PKBF are also summarised in the project proposal (see Appendix C). In general, what is required is an improvement to the trails and a regular maintenance to prevent the paths from being overwhelmed by weeds.

ACTION 19:
GENERAL IMPROVEMENT AND REGULAR MAINTENANCE OF THE EXISTING TRAILS IN FRASER'S HILL WILL BE REQUIRED.

2.5.2 System of trails

Each trail, marked in a different colour, should be set out in a loop i.e. starting and end point should be the same. This would prevent visitors from losing their way. The trails should be clearly marked on the ground, on pamphlets, and on information boards that should be placed along the trails - especially marking on the map exactly at which point the visitor is.

These trails should be graded based on the difficulty of terrain, time taken to complete the trail (based on an average walking pace) and for which age group it is best recommended for. All this information should be contained
in a pamphlet provided at the Visitors Centre. Other information on guided tours etc. for the trails should also be provided at the Visitor's Centre.

**ACTION 20:**

THE TRAILS SHOULD BE MARKED AND GRADED ACCORDING TO THEIR DISTANCES, DIFFICULTY OF THEIR TERRAIN, TIME TAKEN TO COMPLETE THE TRAIL, ETC., AND MAPPED OUT FOR VISITORS.

2.5.3 Educational Experience

The trails should be made interesting and informative, so as to stimulate the interest of their users. They should help visitors to understand the various aspects of the forest ecosystem, such as: (i) species diversity (e.g. orchid species); (ii) adaptation of plants (e.g. pitcher plants); (iii) propagation of species (e.g. spores on the underside of ferns); (iv) medicinal value of the forest; and (v) the relationship between plants and animals (e.g. with birds or earthworms etc.).

The information can be provided on information boards along the trails or incorporated into pocket-sized guide book which the visitors can use on self-guided tours. The guide book technique has been used in the Pasoh Forest Reserve in Negeri Sembilan (Wong et al., 1980) and the Bukit Timah Nature Reserve in Singapore (Choo-Toh et al., 1985). The guide books also illustrate the flora and fauna that the visitor can identify along the trails. PKBF should seek assistance from FRIM to identify interesting features along the trail and prepare the trail guide book. WWFM could provide resource material and examples of trails set out both in Malaysia and abroad.
ACTION 21:
FRIM AND WWFM SHOULD BE INVITED TO HELP SET UP THE EDUCATIONAL INTERPRETATION FOR THE TRAILS.

3 GENERAL MEASURES TO ENCOURAGE A MORE EFFECTIVE USE OF FRASER'S HILL

3.1 General Strategy

At present the Visitor's Centre does provide some general information on the existing activities at Fraser's. However, since there are no organised tours, the visitors are left on their own to explore the wilderness of the area. It is found that, except for the experienced birdwatcher, naturalist and the more adventurous visitors, most of the visitors do not venture very far, or they simply rush through the trails to pass their day. Furthermore, there is often very little to do at night for the nature lovers. One important area which must be aggressively pursued to ensure the success of the 'nature programmes' in Fraser's Hill is active visitor participation in the activities. The two pronged approach suggested in #1.2 is aimed at achieving this objective. The following are WWFM recommendations which should be considered by PKBF.

3.2 Visitor Centre cum Education and Interpretation Centre

3.2.1 General Information

The Visitor Centre should be made a focal point for visitors to Fraser's Hill. The Centre should provide all relevant information, both general and specific, on
nature and nature activity on the Hill. Ideally, an Education and Interpretation Unit should be set up within the general administration of the PKBF. The Unit should be set up within the Parks and Recreation Section of PKBF and would complement the present functions of the Section. The Unit would be responsible for preparing, co-ordinating and updating the information brochures, pamphlets, worksheets, trail guides and display units in the centre. The Unit would also be responsible for the management and publicity of ongoing and proposed activities on Fraser's Hill.

ACTION 22:
THE VISITOR CENTRE SHOULD PROVIDE COMPREHENSIVE AND UPDATED INFORMATION ON ALL ACTIVITIES IN FRASER'S HILL. THE CENTRE SHOULD BE GIVEN MAXIMUM PUBLICITY.

ACTION 23:
PKBF SHOULD CONSIDER THE POSSIBILITY OF SETTING UP AN EDUCATION AND INTERPRETATION UNIT WITHIN THE PARKS AND RECREATION SECTION.

3.2.2 Evening Programmes

Talks and audio-visual presentations on nature can be organised at the Visitor Centre in the evenings. They should highlight the history of Fraser's Hill and the types of activity and general nature programmes that are available. Special night trips such as owling (spotting of night birds) should be arranged whenever possible. Visitors should be made fully aware of the evening programmes available at the Centre.

ACTION 24:
EVENING PROGRAMMES SHOULD BE ORGANISED FOR VISITORS.
3.3 Nature Guides

A very ambitious programme which could be undertaken by PKBF is to provide guided tours for visitors participating in the nature activities, such as recreational forest, bird walks and nature trails. Guided tours may be more appealing to many of the visitors, especially those unfamiliar to nature walks and those with very little knowledge of the natural environment.

WWFM suggests two alternative approaches to setting up a pool of nature guides: (i) PKBF internal guides; and (ii) contracted guides.

3.3.1 PKBF Internal Guides

PKBF could train members of its staff to become nature guides with the cooperation of FRIM, PERHILITAN, WWFM and MNS. The PKBF guides could then work on a rotational basis, for example, one session (of half a day or a couple of hours per day) per week, or on any other arrangement that may be possible. Each session could cover one or more activities such as nature trail, botanical walk, bird walk, night walk, etc.

3.3.2 Contracted Guides

PKBF could also employ full or part-time nature guides on a contract basis. These guides could also act as park interpreters in the Education and Interpretation section of the Visitor Centre, as well as run the evening programmes.

ACTION 25:
PKBFSHOULD TAKE THE NECESSARY STEPS TO EITHER TRAIN INTERNAL GUIDES OR HAVE CONTRACTED GUIDES.
4  FURTHER WWFM CONTRIBUTION

4.1 Present Report

This report is submitted to PKBF, and any comments and feedback on the recommendations and suggestions will be discussed when the WWFM team visit Fraser's Hill later in the month of January.

4.2 Design of Nature Projects

Following the discussion of this report, PKBF should finalise the design for the nature projects. WWFM would be willing to provide further inputs into the design of the projects.

4.3 Resource Material

WWFM will provide from their existing library collection resource material (both local and foreign) for the various proposed nature projects.

4.4 Botanical and Faunal Lists

WWFM will assist PKBF in obtaining an updated bird and butterfly list, list of botanical species of interest (including those of medicinal value), and the list of trees species which are suitable for birds that can be planted in the open areas of Fraser's Hill.
4.5 Relevant References

A comprehensive list of references on Fraser's Hill will be compiled from the Malayan Nature Journal and Naturalists. Other relevant references will also be included. This should form an important component of the information at the Visitor's Centre.

4.6 Fraser's Hill Physical Master Development Plan

To provide conservational input to the Master Plan.
APPENDIX 1

PKBF PROJECT PROPOSAL FOR THE RECREATIONAL FOREST

Objectives

1) To provide the experience of jungle environment and love for the outdoors.

2) To instil an awareness in children towards the value for the preservation of nature.

3) To provide recreational facilities that can simulate life in the forest.

4) To provide an education for children on flora and fauna found in the jungle and subsequent importance for their conservation.

Background

It is the Corporation's intention to promote Fraser's Hill as a center for family recreation. In line with this the recreational forest project will provide a form of recreation that will emphasise the importance of nature and conservation of the balance of ecology. The project was planned approximately two years ago after feedback from discussions with naturalists and experts from the travel industries. A six acre site has been located for the implementation of this project and the former has been found suitable for the needs of this venture.
Concept

1) To provide a chain-link perimeter fencing around the project area for the safety of the children, so that the latter will not stray beyond the boundaries of the recreation area and will be safe from existing wildlife.

2) To provide wood-based structures and play equipment for the usage of the children, blended in with the natural setting.

3) To provide rest huts and shelters for the convenience of the children and their families.

4) To provide benches, directional sign boards, wooden bridges and steps within the confines of the project area.

5) To provide information boards depicting the type, history and background of the flora and fauna found within the area.

6) To release domesticated animals like rabbits, deer, goats, tortoise and others within the fenced area.
APPENDIX 2

PKBF PROJECT PROPOSAL FOR THE BIRD PARK

Objectives

1) To provide a site that is designed specially for visitors with a love for birds.

2) To expose the different species of birds that are found in Fraser's Hill.

3) To educate the visitors on the living habit of the birds and the kinds of plants or trees that the birds like.

4) To create a serene atmosphere at the site.

5) To instil awareness in visitors on the importance of birds in the ecological factor.

Background

Presently, Fraser's Hill is known for its different species of birds. Bird watchers are known to be excited over bird watching trips knowing that they will come across a few native birds of Fraser's Hill. It is the Corporation's intention to promote Fraser's Hill as one of the famous spots in Malaysia for bird watching. Therefore, a bird park will very well suit into this hill resort.
Concept

1) To educate visitors on species of birds and their living habits.

2) To plant berry producing plants or trees that are food for the birds, this action will attract birds into this area.

3) To introduce foreign trees and plants that may attract other species of migrating birds.

4) To have some cage birds placed in between shrubs and trees, this will help to attract other wild birds to this area.

5) To provide wood based benches, sheds, information boards within the confines of the park for the convenience of the visitors.

6) To provide information boards depicting the species, history and migratory season of the birds.

7) To provide a brochure containing relevant information on the types of birds native to this area.
APPENDIX 3

PKBF PROJECT PROPOSAL FOR THE NATURE TRAILS

Objectives

1) To provide an insight into the natural environment of Fraser's Hill.

2) To educate visitors to the nature trails on the different flora and fauna in Fraser's Hill.

3) To provide identification of the different species of plants, trees, birds, insects etc. found within the trails.

4) To provide means of recreation for nature lovers and trekkers.

Background

Presently the Corporation operates five nature trails for the benefit of nature lovers. However, the maintenance of these trails is lacking and in need of improvement. The flora and fauna have also not been identified and there is a lack of sufficient facilities and information for visitors. As a result of this visitor interest to the nature trails has declined and there is an immediate need to upgrade this facility.
Concept

1) To carry out identification and nomenclature of flora and fauna found within the nature trails.

2) To provide information on the development and history of the flora and fauna.

3) To display prominent sign boards and directions for the benefit of the trails users.

4) To provide rest huts and benches for the convenience of visitors and to improve the ground conditions of the trails.

5) To provide a brochure containing relevant information on these trails for the benefit of visitors.
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SYMBOLS AND ABBREVIATIONS

# : cross-reference to another paragraph in this report
asl : above sea level
FRIM : Forest Research Institute Malaysia
m : metre
MNS : Malayan Nature Society
PKBF : Perbadanan Kemajuan Bukit Fraser
WWFM : World Wide Fund for Nature Malaysia

REFERENCES
