

# SROOPS002 Plan for Minimal Environmental Impact

## PATHFINDER SPECIALIST AWARD



April 2010

# BIBLICAL PRINCIPLES

- **God created our world and everything was declared good. Gen 1:1-31.**
- **Man was asked to be 'master' and to 'subdue it' in the sense of 'tending and caring for it'. Gen 1:26, 28; 2:15.**
- **God cares for the world of nature.**
- **The outdoors is a place for meditating about God. Mk 1:35, Lk 4:42.**
- **The world of nature reveals Gods love. Ps 8:3,4; 19:1-3; 36:6; 107:24; Job 12:7-12; Prov 6:6-8; Rm 1:18-20.**

# ENVIRONMENTAL TERMS

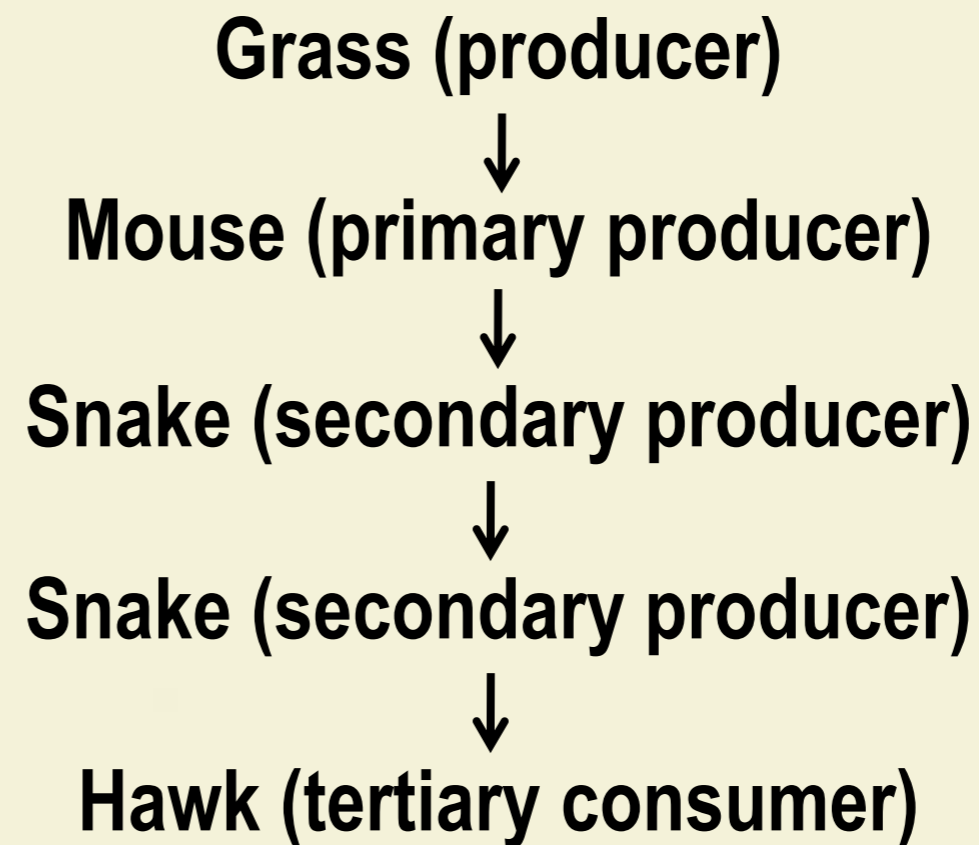
- **ADAPTATION** – where a living entity is able to survive changes in community conditions.
- **BIOSPHERE** – a relatively thin zone of air, soil and water around the earth that is capable of supporting life.
- **CHANGE** – when an ecosystem is affected by a natural change such as climate.
- **COMMUNITY** – an interacting group of various plants and animals in a common location.

# ENVIRONMENTAL TERMS

- **CONSERVATION** – planned management of a natural resource or environment.
- **CYCLES** – various organisms depending on each other and their surroundings for survival.
- **DIVERSITY** – the range of living things within an area.
- **ECOLOGY** – the relationships between organisms and their environment.
- **ECOSYSTEMS** – a collection of living, or biotic organisms that live together in a specific location and interact with their non-living , or abiotic environment.

# ENVIRONMENTAL TERMS

- **ENERGY FLOW** – demonstrated in the food chain for a specific ecosystem. i.e.



# ENVIRONMENTAL TERMS

- **INTER RELATIONSHIPS** – the way different living things interact and exist together in specific locations and space.
- **ENVIRONMENT** – applies to ecology and significant sites where humans have created community in the past.



# SOURCES OF ENVIRONMENTAL IMPACT

Humans affect the environment in different ways:

- **SOIL** – stepping off the path, digging, soil carried off with shoes.
- **VEGETATION** – trampling, breaking, tearing branches, vegetation damage on entry/exit points of lakes/streams.
- **POLLUTION** – rubbish left at camping sites causes damage to animals, vegetation, soil, detergents and soaps affect water.
- **DISTURBANCE OF FAUNA** – clearing of fauna impacts habitats, camping too close to water supplies, feeding animals makes them dependant.



# SOURCES OF ENVIRONMENTAL IMPACT

Humans affect the environment in different ways:

- **GEOLOGY** – erosion caused by loss of vegetation due to camping, hiking etc, removal of small stones through slipping climbing shoes.
- **FIRE** – campfires leave scars, create heat in localized soil areas, leave ashes.
- **NEW FAUNA AND FLORA** – seeds may be carried on clothing to a new site, human waste may contain seeds that can take root.
- **GRAFFITI** – affects visual beauty of the bush.



# SENSITIVE AREAS

• A sensitive area is any part of the environment that is unable to adapt to any major change.

**Examples include:**

- **Vegetation – wetlands, rainforests, coastal regions.**
- **Animals and birds**
- **Geographical features**
- **Historical features**
- **Water sources**
- **Farmland**

# SOURCES OF INFORMATION ON ENVIRONMENTAL IMPACT

- Landowners.
- Farmers.
- Managers or rangers of a National Park or Reserve.
- Aboriginal or Torres Strait Islander custodians.
- Miners.
- Community People.
- Internet.

Guide books.

- National Trust.



# WAYS TO REDUCE ENVIRONMENTAL IMPACT

## POLLUTION – HUMAN WASTE

- Locate toilet trench at least 100m from campsite and waterway.
- For individual waste disposal dig a hole min. 15cm deep and cover well.
- Caves – carry out waste.
- Alpine – carry out waste.

# WAYS TO REDUCE ENVIRONMENTAL IMPACT

## POLLUTION – RUBBISH

- Carry out all rubbish including food scraps, paper, tins etc.
- Pre-pack to reduce scraps.
- Plan meals so there is no food waste.

# WAYS TO REDUCE ENVIRONMENTAL IMPACT

## POLLUTION – SOAP & DETERGENT

- Wash with soap or detergent at least 50m from the water.
- Scatter dirty water when finished.
- Use scourers or sand as alternative to detergent.

# WAYS TO REDUCE ENVIRONMENTAL IMPACT

## VEGETATION – TRAMPLING & BREAKAGE

- Follow paths (animal or manmade) wherever possible.
- Do not cut corners if zigzagging up or down slopes.
- Avoid creating multiple paths, even when muddy.
- Keep group sizes small.
- Spread out in grassy areas to minimize impact.
- Choose a route to avoid breakage of branches.

# WAYS TO REDUCE ENVIRONMENTAL IMPACT

## VEGETATION – TRAMPLING & BREAKAGE

- Take a map and compass to check your position and direction of travel particularly when track is poorly defined and no signage.
- Limit the destruction and collection of dead timber.
- Abseiling/rock climbing – set up, abseil and wait on open rock faces. Choose rock faces away from vegetation.

# WAYS TO REDUCE ENVIRONMENTAL IMPACT

## VEGETATION – TRAMPLING & BREAKAGE

- **Caving – keep to designated paths or follow the leader to minimize impact.**
- **Canoeing – choose rocky or sandy entry and exit points.**



# WAYS TO REDUCE ENVIRONMENTAL IMPACT

## COMPACTING SOIL & OTHER DEPOSITS

- When no designated or recognized camping site, vary the camping and activity sites to allow for vegetation re-growth.
- Camp in designated site where a camping area has already been assigned.

# WAYS TO REDUCE ENVIRONMENTAL IMPACT

## DISTURBANCE OF FAUNA

- Stay away from recognised sensitive areas.
- Choose camping or activity sites that minimize any disturbance of the fauna unless for OH&S reasons.
- Identify any specific flora or fauna and keep people from damaging them.
- Don't camp on animal tracks.
- Don't camp beside fauna drinking holes.

# WAYS TO REDUCE ENVIRONMENTAL IMPACT

## DISTURBANCE OF FAUNA

- Don't feed animals or birds as this promotes dependency.
- Don't leave food out for animals.
- Don't kill harmful animals – leave them alone.

# WAYS TO REDUCE ENVIRONMENTAL IMPACT

## INTRODUCTION OF NEW FLORA & FAUNA

- Avoid where possible.
- Don't take animals with you.
- If moving from a polluted site (where there could be lots of weed seeds) remove all of the seeds.
- Clean all equipment well, including shoes.
- Watch what you eat. Raspberry jam can introduce raspberry seeds.

# WAYS TO REDUCE ENVIRONMENTAL IMPACT

## CAMP FIRE SCARS

- Try to avoid using a campfire as they contribute to environmental degradation.
- Use a fuel stove instead, especially in remote/sensitive areas.
- Use only a designated fire place.
- If you have to set up a new site, choose bare ground.

Keep it small and safe.

- Completely remove all traces afterwards.



# WAYS TO REDUCE ENVIRONMENTAL IMPACT

## NOISE

- **Respect other campers when camping at a public campsite.**
- **Keep all noise down, especially between 10pm and 7am.**
- **No electric generators or compressors unless permitted.**

# WAYS TO REDUCE ENVIRONMENTAL IMPACT

## CULTURAL HERITAGE

- Show respect.
- Stay within any designated boundaries.
- Learn about the history or the significance of the location.

# WAYS TO REDUCE ENVIRONMENTAL IMPACT

## GATES NOT LEFT AS REQUIRED BY LANDOWNERS

- Leave gates as you find them.
- Follow landowners instructions at all times.



# METHODS FOR MINIMIZING IMPACT

- **Pre-visit the activity site – look at risk and environmental management.**
- **Identify the ecosystem and the possible impact of camping or using the site for an outdoor activity.**
- **Identify the possible impact of the activity on the ecological community.**
- **Develop methods of avoiding or reducing impact.**
- **Identify the sensitive areas and choose to either avoid them or follow accepted methods for visiting.**



# METHODS FOR MINIMIZING IMPACT

- **Develop an activity plan that minimizes the environmental impact on the area.**
- **Prepare the activity equipment for the area.**
- **Promote minimal impact camping with your group.**
- **Monitor the group during the activity/camping.**
- **Evaluate the impact after the event.**

# ENVIRONMENTAL IMPACT MANAGEMENT PLAN

## Appendix 1: Environmental Impact Management Plan

Location \_\_\_\_\_

Activity \_\_\_\_\_

Date \_\_\_\_\_

Person in Charge \_\_\_\_\_

Size of Group \_\_\_\_\_

Time of Stay \_\_\_\_\_

Person doing assessment \_\_\_\_\_



# ENVIRONMENTAL IMPACT MANAGEMENT PLAN

Ref	Perceived environment that could be impacted by the activity	Steps to minimise the impact
	Water – quality	
	Vegetation	
	Wildlife	
	Geology	
	Soil	
	Location	
	People	

After the Activity, record what changes you would make to improve the method of minimising the impact? \_\_\_\_\_