



Habitat Management: Planning and Monitoring

Introduction

- ☀ Land-use change – disappearance of many wildlife habitats
- ☀ Fragmented
- ☀ Nature reserves ever more important:
 - ☀ Patches of natural assemblages
 - ☀ Research
 - ☀ Public enjoyment
 - ☀ Model for change
- ☀ Management Framework

Site Management

- ✱ First know what's there – inventory
- ✱ Understand its ecology
- ✱ Identify site objectives
- ✱ Set out work programme
- ✱ Identify resources required (money, labour, skill set)
- ✱ Plan a monitoring schedule

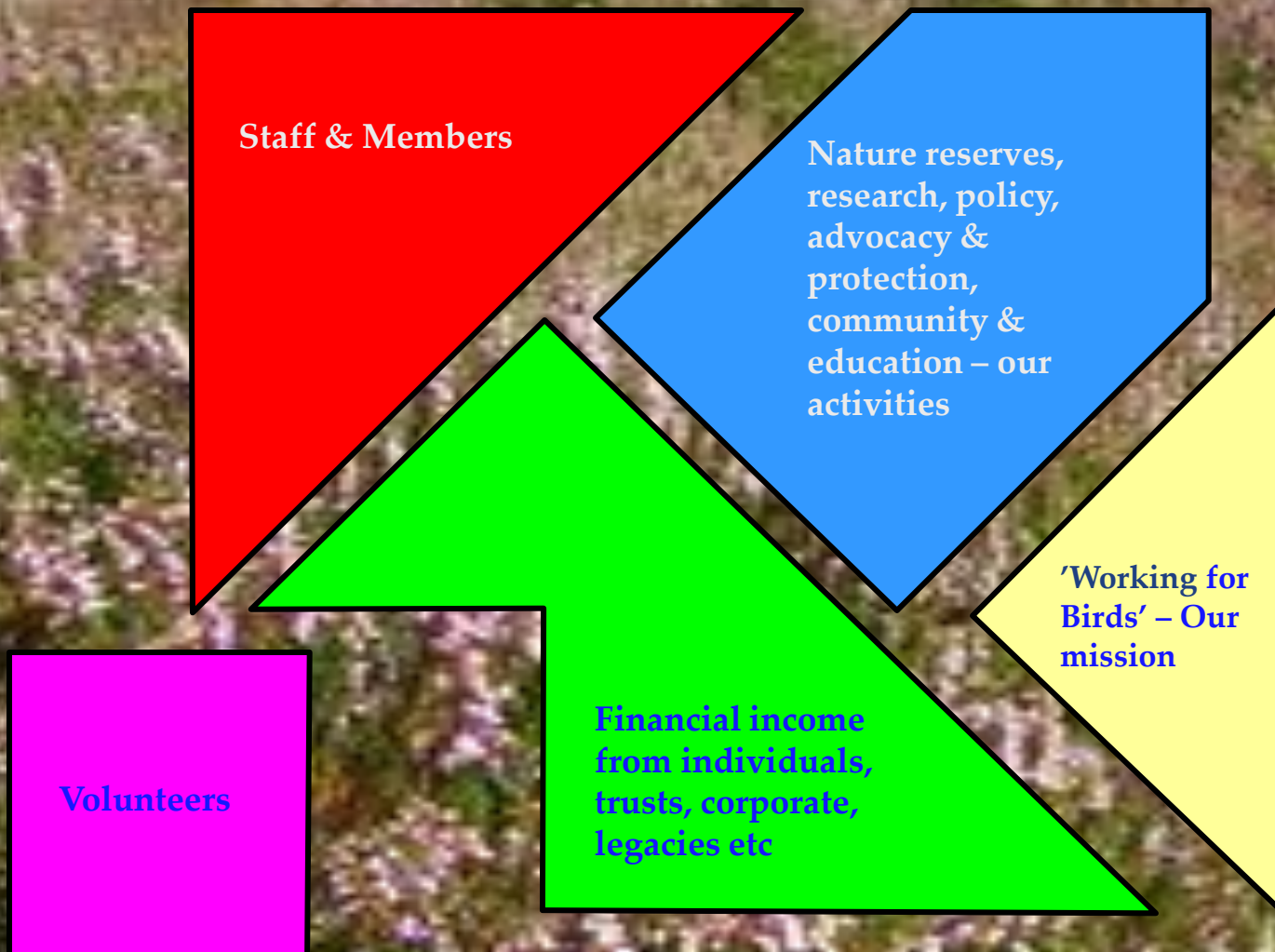
Management Plan Functions:

- ☀ Even if the plan is 'not to manage' it is still necessary to have a management plan!
 - ☀ Feature evaluation
 - ☀ External features which may pose significant threats
 - ☀ Legal constraints identified
 - ☀ Monitoring

Management Plan Functions:

- ✱ Site Description – physical and biological
- ✱ Identify purpose of managing site
- ✱ **Conflict anticipation**
- ✱ Identify management protocol
- ✱ Assess necessary level of monitoring
- ✱ **Organise staff and resources**
- ✱ Organise training
- ✱ **Link with species and habitat action plans**
- ✱ Facilitate communication between stakeholder/interest groups

Managing Resources: Staffing Projects



Volunteers!

- ✱ Many conservation organisations (and others) use volunteers
- ✱ In most areas there is an organisation which manages volunteers eg in Swansea the SCVS
- ✱ Some are bad at managing volunteers and have a high turnover
- ✱ Others good eg RSPB, NT.

The wheel of volunteer management



Why do volunteers leave?

"I didn't understand what I was supposed to do."

"I didn't feel welcome"

"I wanted something different to do"

"I didn't feel involved."

"I wanted something different to do."

"The organisation was taking advantage of me"

"I didn't know why I'd been asked to do what I was doing."

"I didn't like being given a task with no support"

"I couldn't afford the bus fare"





the
nation's
second
favourite
pastime..

* Source: "The Social Psychology of Leisure" Professor Michael Argyle (published by Penguin Books, 1997)

... is voluntary work, actually *

<http://www.volts.org.uk/volondon>

Thousands of people are doing it
all the time... you could too

0181 960 3722

V&B
Volunteer Bureau



"It gives me
faith in my
own abilities"



"It's amazing
helping others"



"I found
a new
career"



"It was a
stepping stone
to get back
to work"



"I got
great work
experience"



"I'm helping
to change
the world"



"I like the
responsibility"



"I met my
husband to be"

BECOME RICHER. WORK FOR NOTHING.

Volunteering is a life enriching experience. And at the Volunteer Centre we have hundreds of opportunities for people from all walks of life.

Brecon Beacons National Park

- ✴ Shaped by thousands of years of human use interacting with a natural environment
- ✴ Variety of habitats – exposed open moors of the uplands to the gravel river beds of the Usk
- ✴ Management over the centuries has modified most natural habitats

Brecon Beacons National Park

- ✪ Extensive grasslands – grazing livestock
- ✪ Managed woodlands – cutting, removing timber and replanting
- ✪ Rivers and wetlands altered by drainage and flood defences
- ✪ Semi-natural landscape

Volunteering in BBNPA: Car Park Watch Scheme

- ☀ 2003 – crime wave in Talybont
- ☀ Powys Police, Forestry Commission, BBNPA
- ☀ Heavily used tourist areas in central Park
- ☀ Car crime ↓85%



Public Rights of Way Surveys



BBNPA, 2010

- ✱ 1980km of public rights of way
- ✱ Obligation to survey 5% each year
- ✱ Farmland, higher common land
- ✱ Volunteers check
 - ✱ Paths open
 - ✱ Ease of use
 - ✱ Stile, bridge and gate condition

Guided Walks

- ☀ Themed walks staffed by volunteers (60%)
- ☀ Knowledge from residents
- ☀ Wardens & BBNPA also



BBNPA, 2010

Practical Work Parties

- ☀ Weekly opportunities throughout the year
- ☀ Supervised
- ☀ Woodland thinning and coppicing
- ☀ Maintenance bridleways
- ☀ Grassland improvement
- ☀ Health & Safety & training



BBNPA, 2010

A misty, low-angle photograph of a forest floor. The foreground is filled with tall, dry grass and some green plants. In the background, a dense forest of trees is visible, their forms softened by a thick mist or fog. The overall atmosphere is quiet and somewhat somber.

Habitat management

Access & Vandalism

Introduction

- ☀ Growth in outdoor recreation; wildlife conservation
- ☀ ↑ visitors to reserves and countryside
- ☀ Access issues important
- ☀ Disturbance levels
- ☀ Careful planning

Overview

☀ Access:

Zoning

Car parks/footpaths

Facilities

Signage

☀ Vandalism:

Prevention

Examples



Access: a closer look

- ✱ To allow or not
- ✱ Extent
- ✱ Physical damage
- ✱ Disturbance
- ✱ Complete restriction – unusual
- ✱ Careful planning and site layout

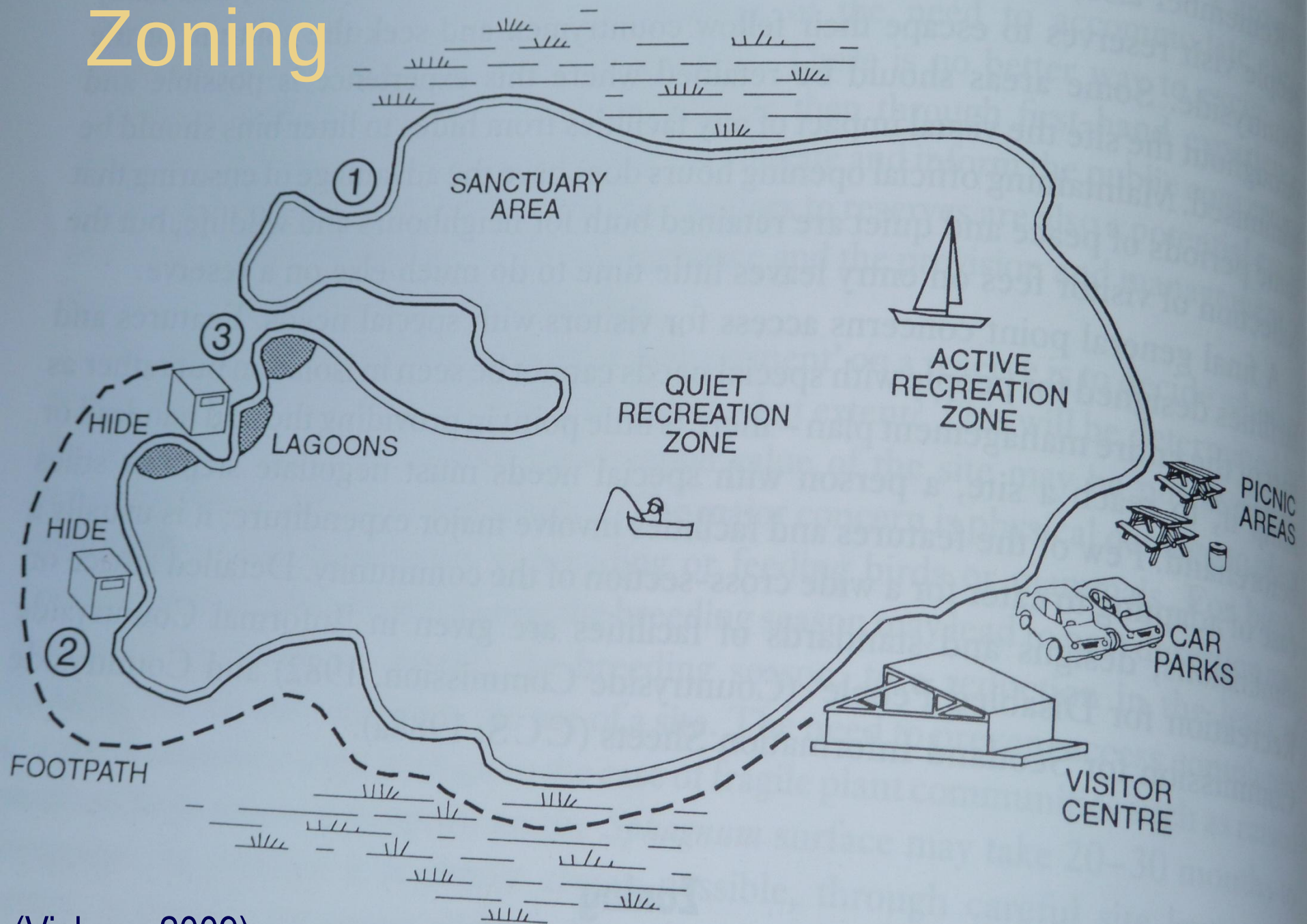
Extent of Access

- 
- A photograph of a white building with a covered walkway and stone steps, with people walking on it. The building has a dark roof and several windows. The walkway is covered by a dark frame. The steps are made of stone and have a metal railing. People are walking on the steps and the walkway. The sky is blue and there are trees in the background.
- ☀ Resources available
 - ☀ Nature of the site
 - ☀ Development of facilities
 - ☀ Insurance policy/public liability cover
 - ☀ Maintenance of quiet times/places
 - ☀ Major expenditure in some cases
 - ☀ Cross-section of needs

Zoning

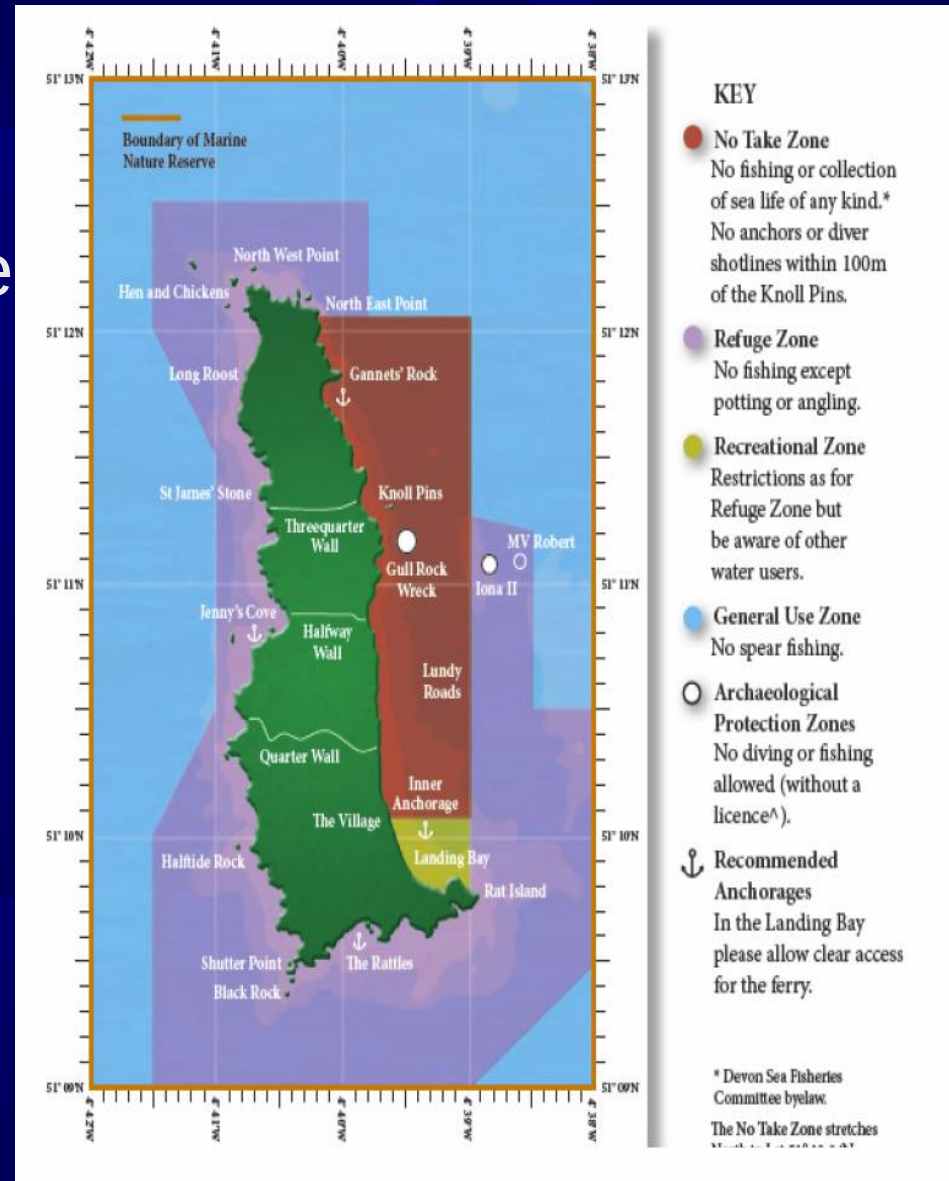
- ✱ Concentration of recreational activity in certain areas
- ✱ Economical
- ✱ Mapping sensitive areas – first step
- ✱ Graded use – noise and activity levels.
- ✱ Positioning paths or hides dependent on zoning

Zoning



Zoning

- ☀ Seasonal/permanent
- ☀ Useful on waterbodies and offshore areas
- ☀ Effective at dune sites
- ☀ Waymarked trails



Seasonal zoning

- ★ Peatlands – restrict access in summer and/or winter
- ★ Coastal areas – breeding seabirds/seals/wintering waders
- ★ Gannets *Sula bassana* on Grassholm



Car Park Provision

- ☀ Control of access
- ☀ Sets maximum numbers
- ☀ Free draining soils
- ☀ Minimal visual impact
- ☀ Screening
- ☀ Orderly layout



Car Park Provision

- ☀ Appearance – in keeping with surroundings
- ☀ Small enclosed bays – vulnerable to theft or vandalism
- ☀ 5% special needs
- ☀ Wide spaces & level access



Footpaths

☀ Encouraging walkers to keep to paths:

- Fences/barriers
- Screens of shrubs and hedges
- Boulders
- Well-positioned logs
- Woodchip paths
- Mown central strips



Footpaths

Siting:

- Topography & slope - drainage
- Soil type & vegetation
- 7° gradient optimal
- Ditches for run-off
- Zig zags

Ascent steep slopes & descent gentle ones

Steps



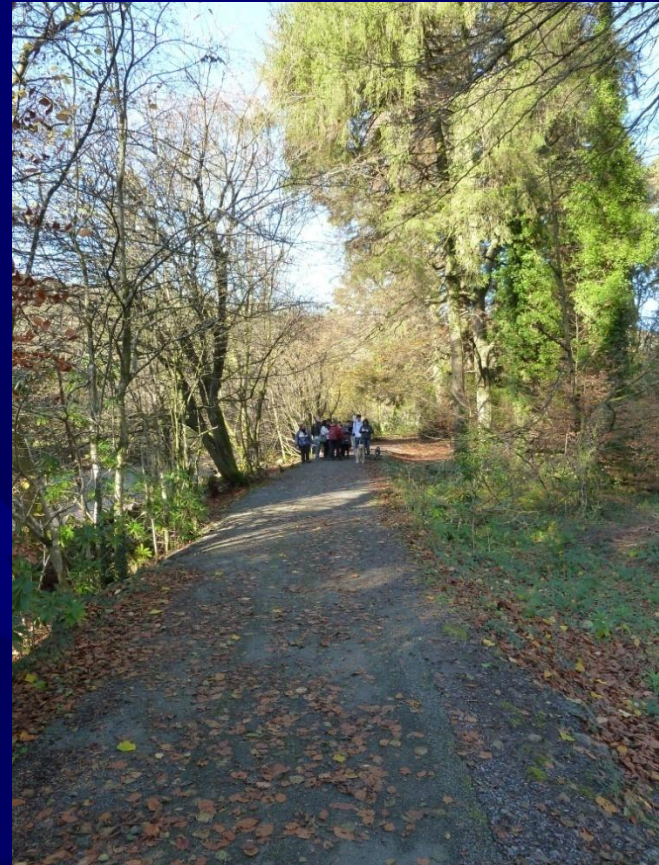
Trails

- ☀ Distances relatively short
- ☀ Figure of eight
- ☀ Mapping or information



Footpaths

- ☀ Unobtrusive
- ☀ Easily maintained
- ☀ Minimum liability to erosion
- ☀ Follow natural boundaries
- ☀ Topographic shelter
- ☀ Avoid direct ascents & straight line paths



Footpaths

- ☀ Resistance to wear and tear-soil type
- ☀ Drainage
- ☀ Waterlogging – soil appearance
- ☀ Boardwalks – width and line
- ☀ 1.0m; 1.2m; 1.7m
- ☀ Viewing platforms
- ☀ Passing places



Footpaths

- ☀ Peat areas – type of timber
- ☀ Beech *Fagus sylvatica*
- ☀ Sweet Chestnut
Castanea sativa
- ☀ Fixed dunes
- ☀ Natural materials



Hides



- ✴ Not essential
- ✴ Natural viewpoints
- ✴ Screens
- ✴ Location – bird oases, feeding area
- ✴ Unobtrusive
- ✴ Into banks or against background vegetation

(Patterson, 2007)

Hides



- ☀ North facing
- ☀ Or east facing at roost sites
- ☀ Natural materials
- ☀ Mimic barns
- ☀ Vandalism
- ☀ Bolt-ons

(Patterson, 2007)

Other facilities



- ✦ Bins, toilets, benches, picnic tables
- ✦ Minimum visual impact
- ✦ A 'necessary evil'
- ✦ Invest in good quality products

Signage



- ✴ Welcoming and unobtrusive
- ✴ Visitor centre
- ✴ Convey uniqueness
- ✴ Species information
- ✴ Warnings – adders
- ✴ Positioning
- ✴ Fingerpost signs

Signs



Signs



- ☀ Natural materials
- ☀ Fibreglass – maps – durability
- ☀ Steel – if vandalism is an issue

What does term **VANDALISM** mean?

- ★ Vandalism *n. the deliberate destruction caused by vandal or an instance of such destruction.*

(Collins Concise Dictionary, 1989)

- ★ So *deliberate* damage



Vandalism

- ★ How can deliberate damage to habitat occur?
 - Pollution
 - Noise
 - Disturbance
- ★ Frequent proximal to urban areas
- ★ Man-made artefacts to a minimum
- ★ Swift action
- ★ Locals – ‘make no enemies’
(Vickery, 2008:42)



Habitat management and vandalism

- ☀ How can deliberate damage to habitat occur?
 - Setting fires (arsonists)
 - Stealing animals or plants for sale or trophies eg stealing bird eggs or killing tigers for their skins or rustling animals for sale or cruelty
 - Stealing items protecting habitat eg fencing, gates
 - Stealing items explaining habitat eg maps, notices, interpretation panels



Habitat management and vandalism

★ How can *deliberate* damage to habitat occur?

- Damaging environment so no longer supports species that make it special eg farmers ploughing up land, stopping badger setts
- Spreading disease eg myxamatoxis rabbits
- Ignoring rules
- Driving vehicles over sensitive habitats eg scooters, motor bikes, bikes, 4 wheel drives
- Litter



Habitat management and vandalism

How can deliberate damage be prevented?

- Law eg CROW Act
- Introduction non-natives
- Damage to SSSIs
- Crime Prevention
 - Wild Life officers in police, reserve wardens, reserve watch systems, CCTV over rare nests
- Public education/awareness



Habitat management and vandalism

- ☀ Design of reserves; reduction of access to sensitive areas, keeping parking away from important areas
- ☀ Secrecy; not revealing where rare animals, plants located so can't be stolen /collected



Habitat management and vandalism examples of practise



- ✦ Blocking and locking of entrances to Rheola forest
- ✦ Use of drainage channels around sensitive heathland areas in NPT - stop access of non-authorized vehicles