Habitat management

Volunteers, Access & Vandalism

Introduction: Access

- 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

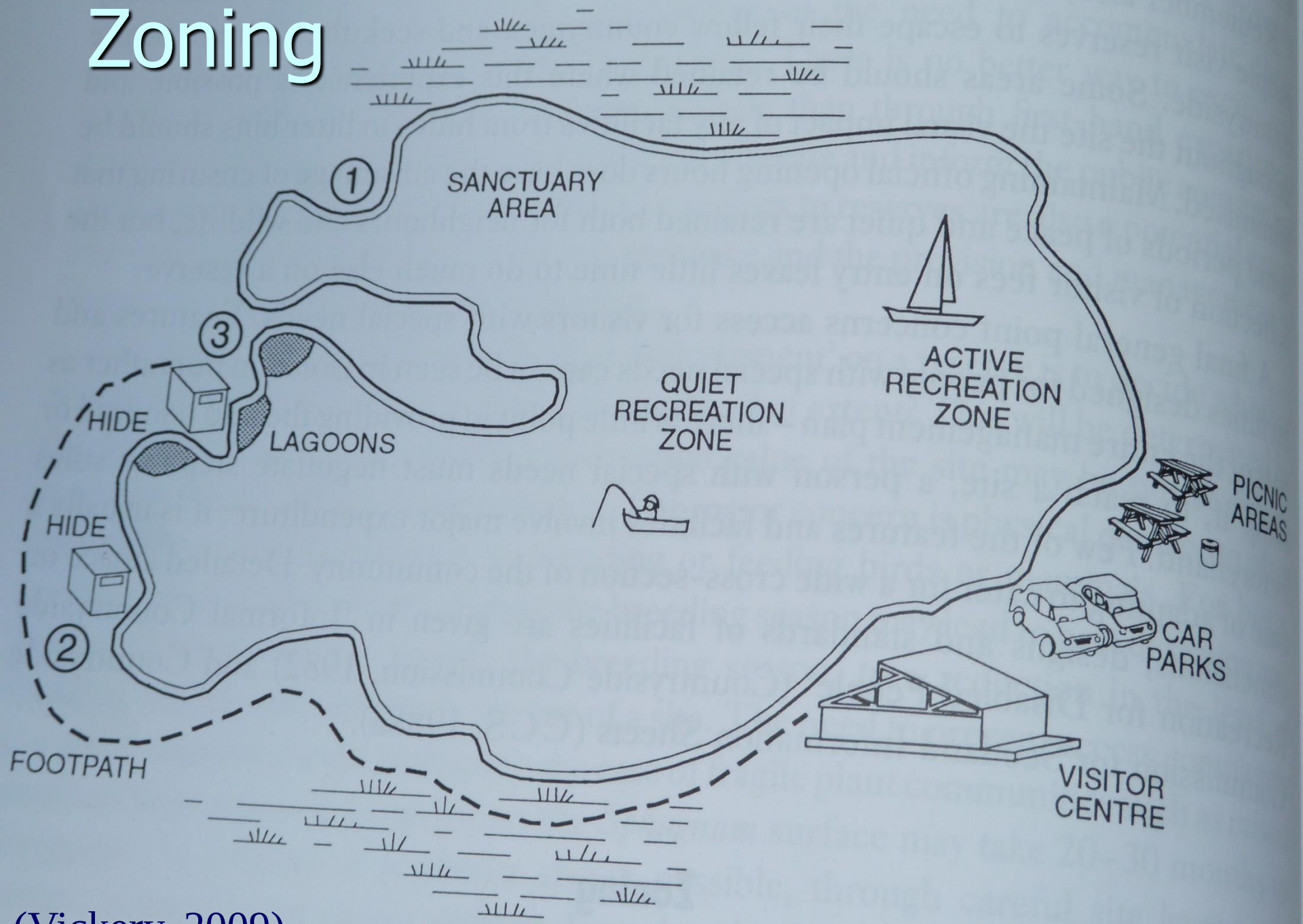


- Resources available
- Nature of the site
- Development of facilities
- Insurance policy/public liability cover
- Maintenance of quiet times/places
- Major expenditure in some cases
- Cross-section of needs

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

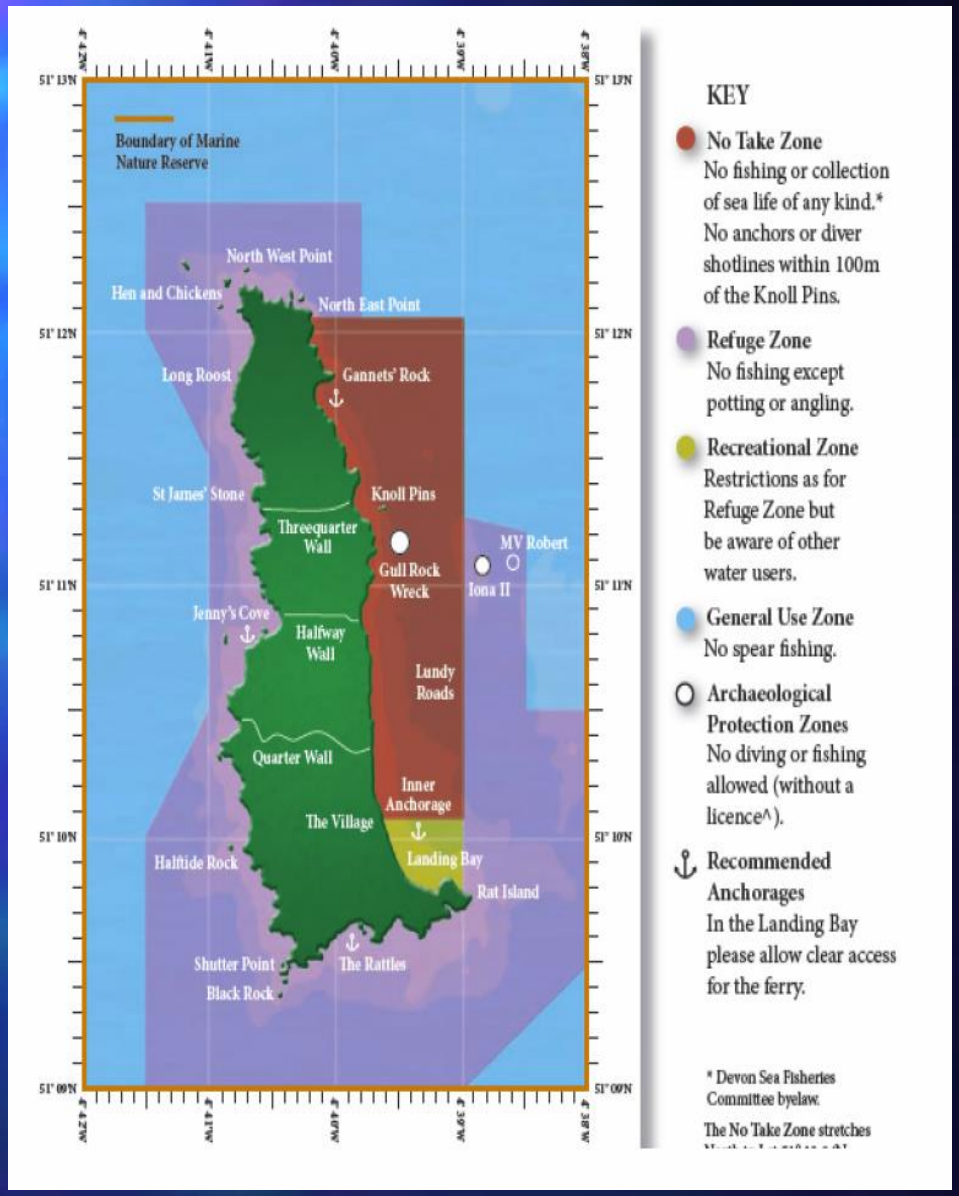
Zoning



(Vickery, 2009)

Zoning

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



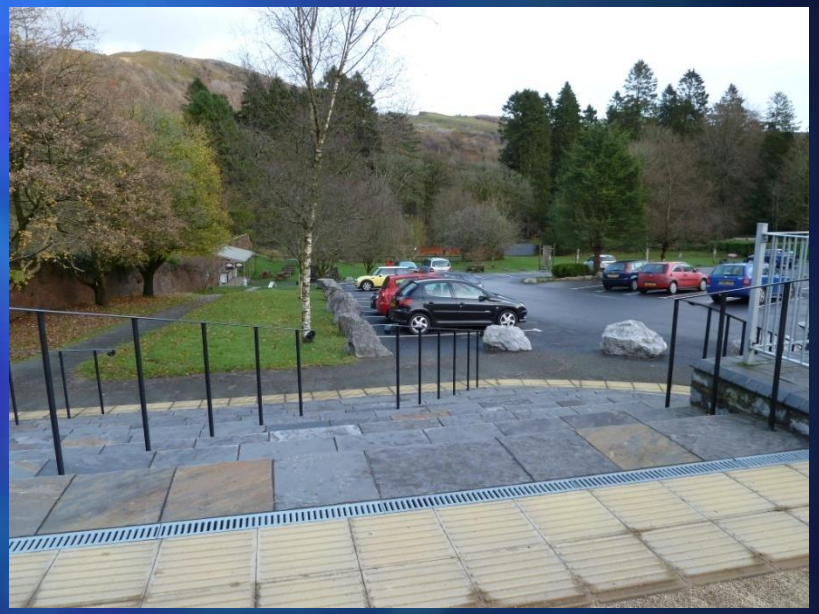
Seasonal zoning

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



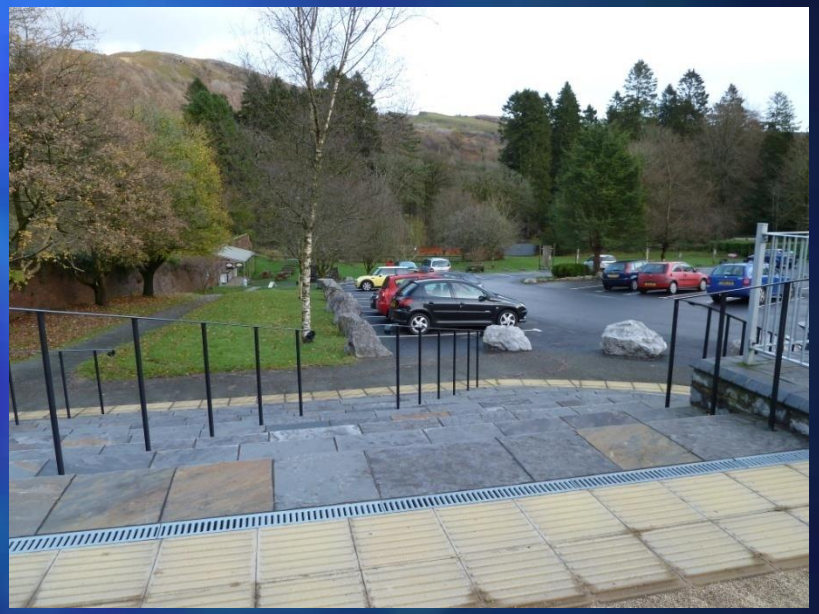
Car Park Provision

- 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



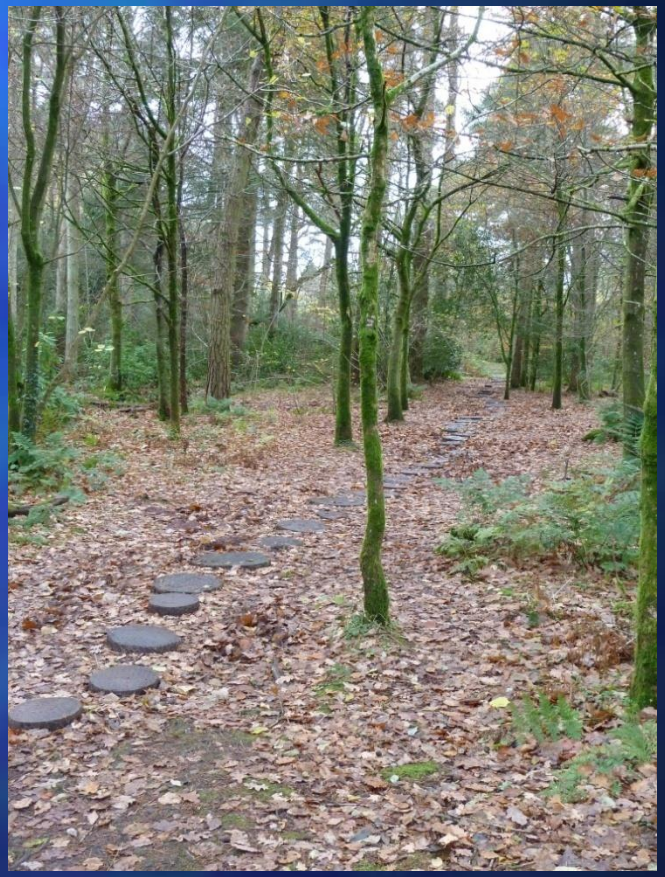
Footpaths

- Siting:
  - Topography & slope - drainage
  - Soil type & vegetation
  - 7° gradient optimal
  - Ditches for run-off
  - Zig zags
- Ascent steep slopes & descent gentle ones
- Steps



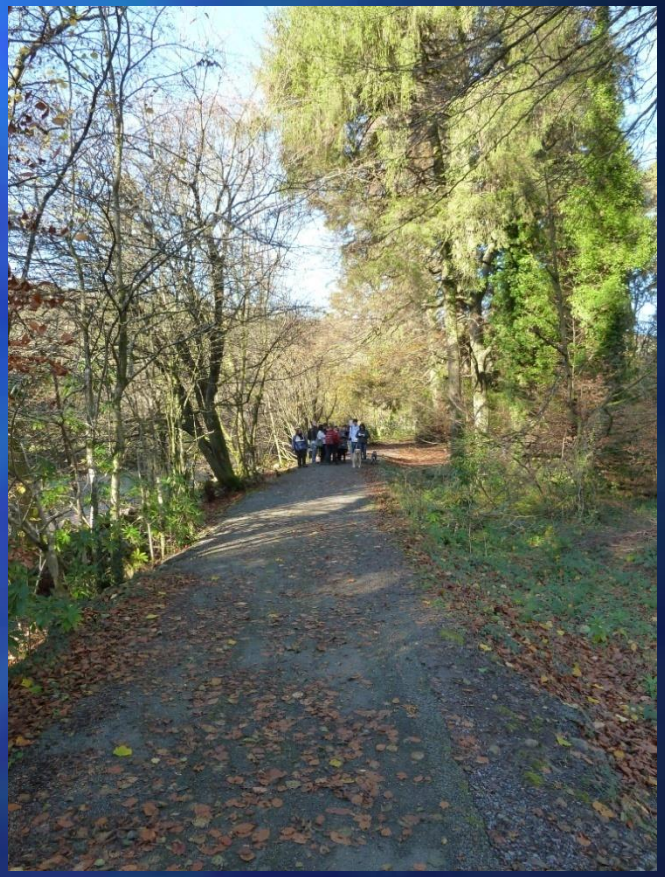
Trails

- 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





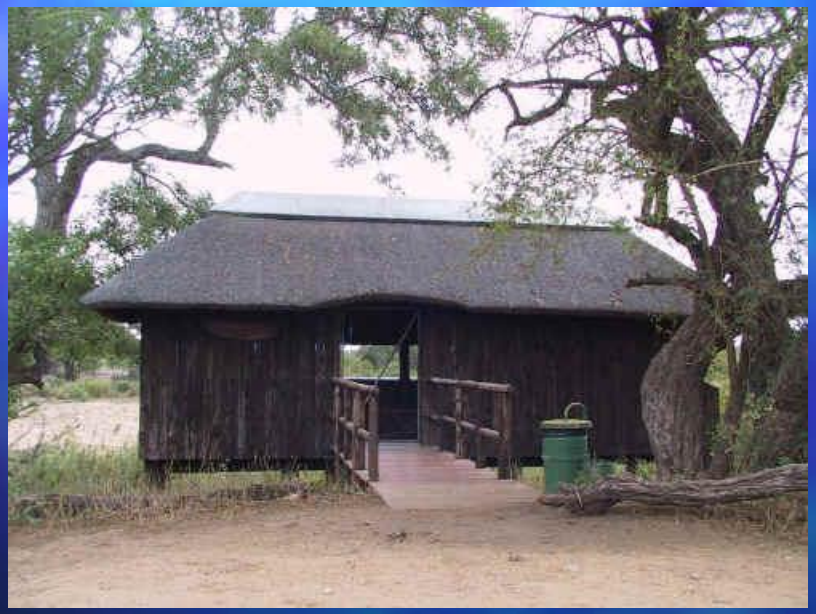
Hides



(Patterson, 2007)

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

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 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 myxamatosis rabbits
  - Ignoring rules
  - Driving vehicles over sensitive habitats eg scooters, motor bikes, bikes, 4 wheel drives
  - Litter





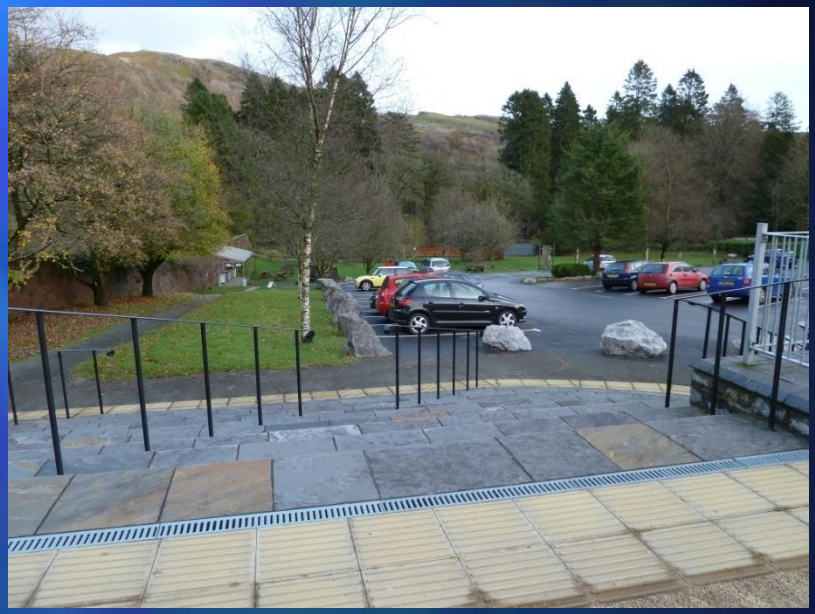
Habitat management and vandalism

- How can deliberate damage be prevented?
- Deterrents:
  - 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

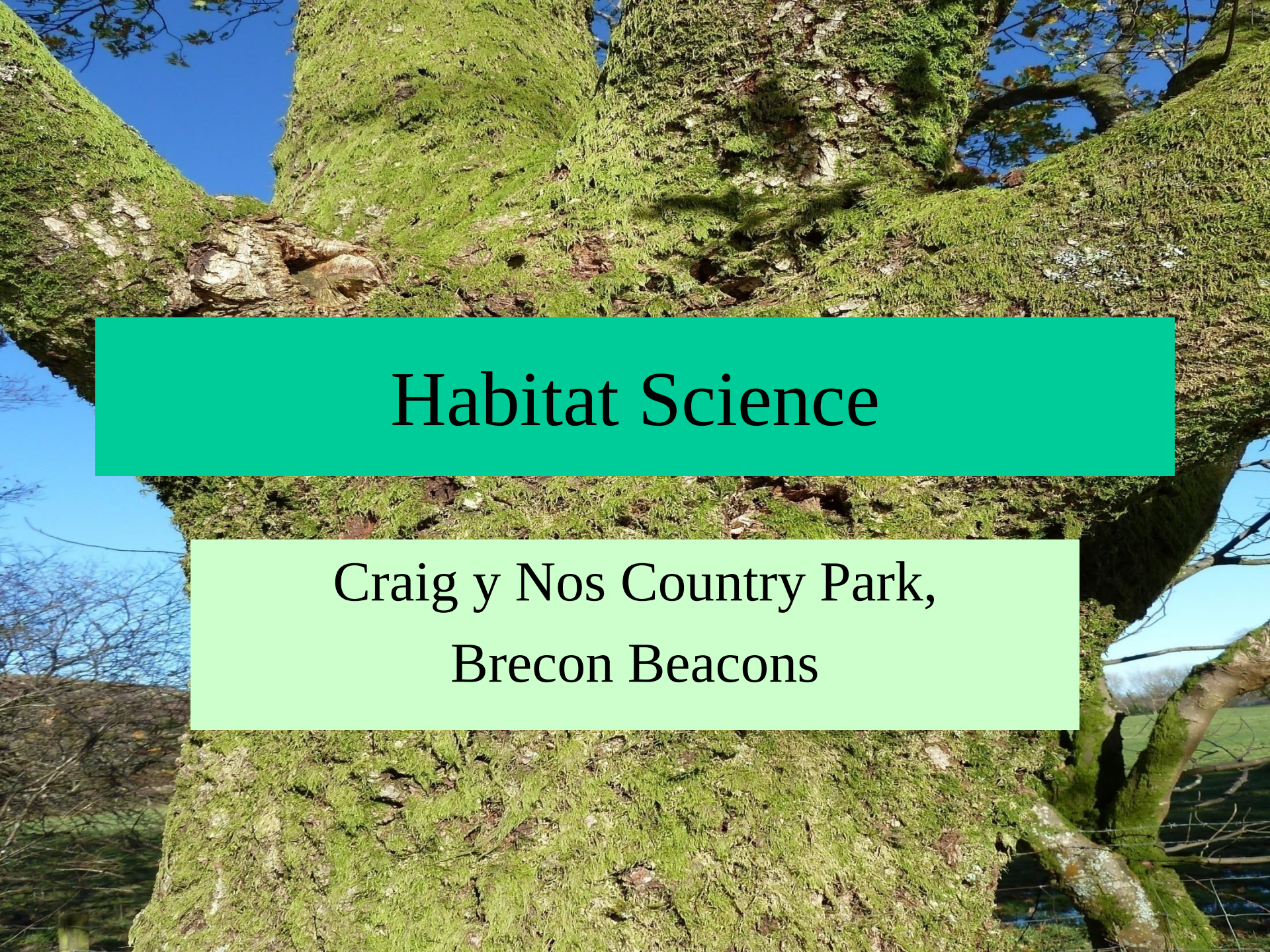
- Design of reserves; reduction of access to sensitive areas, keeping parking away from important areas
- Secrecy; not revealing where rare animals, plants located so can't be stolen /collected



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-authorised vehicles



Habitat Science

Craig y Nos Country Park,

Brecon Beacons

Questions

- What is the site managed for and what evidence is there of potential anthropogenic threats
- Assignment - Put forward management ideas which would improve the site in terms of Biodiversity

Historical Significance



Following recent vegetation clearance.



Historical context

- Built 1840s
- Adelina Patti – purchased 1878
- Castle – Grade II listed building
- Theatre – Grade I listed opera house
- Winter garden – Patti Pavilion
- Tuberculosis hospital – geriatric unit



TB treatment at CYN in the 1940s



Managed for Resources & Public Access









Habitats: Natural Resource

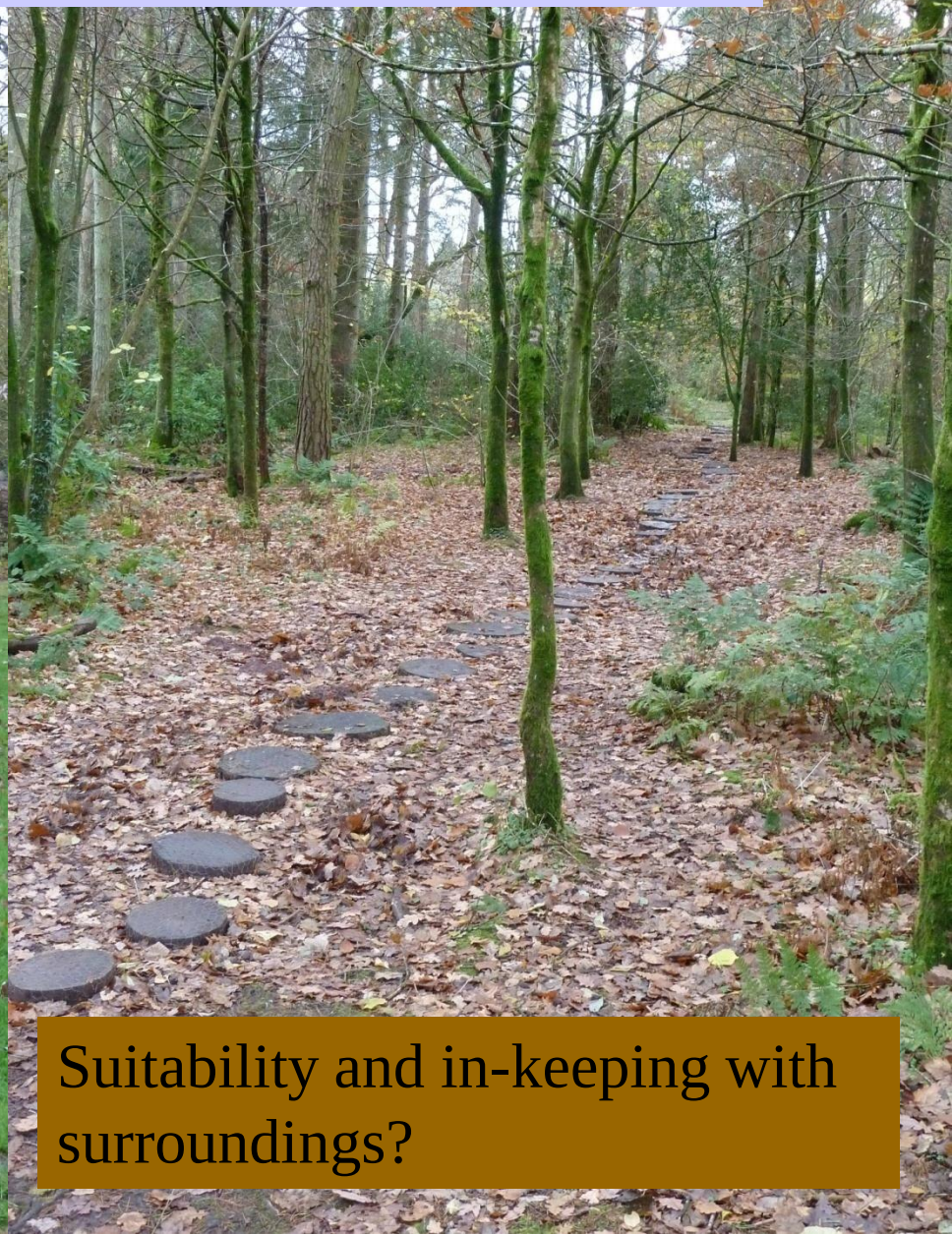
- **40 acres:**
  - **SSSI: ash wood on limestone scree**
  - **Wildflower/hay meadow**
  - **Beech wood**
  - **Rhododendron tunnel**
  - **Freshwater lakes/ponds**
  - **Pavilion lawn**

Access to Public



Managed for people: Access





Suitability and in-keeping with surroundings?









Paths

Bridges

Seating

Access Points: Beacons Way









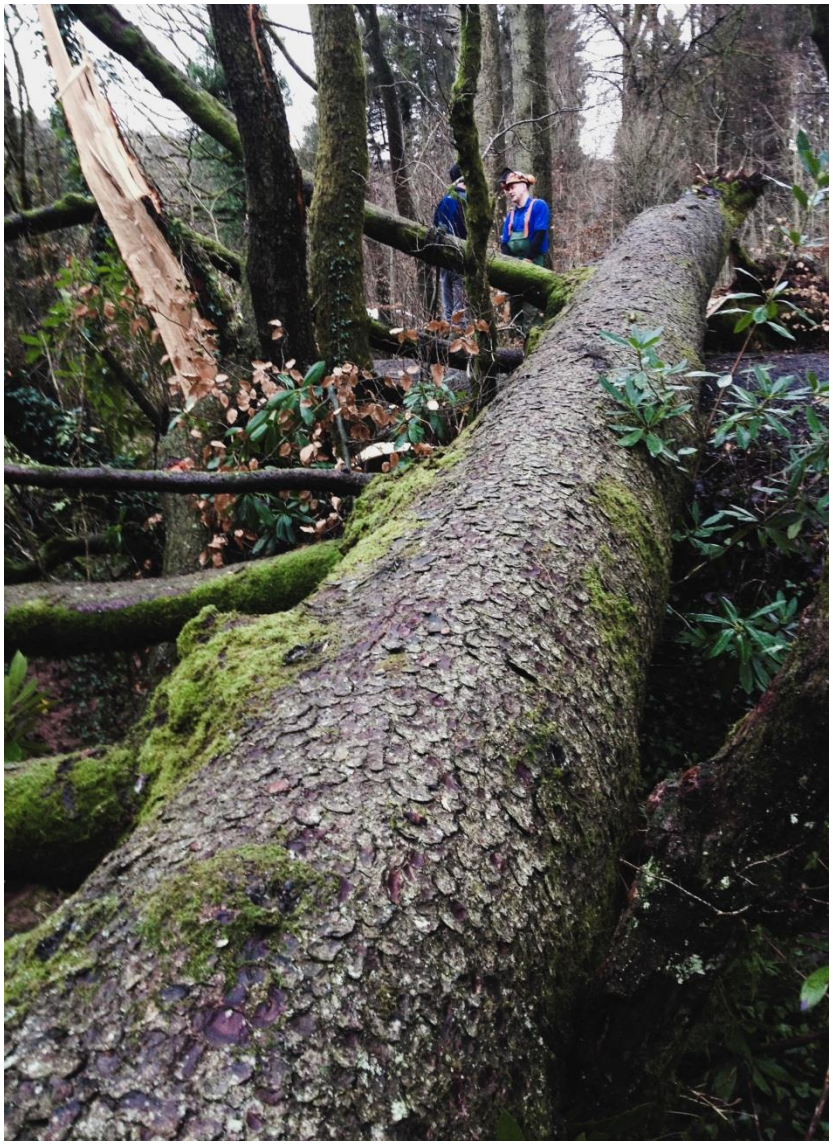




Not quite zoning but restriction of access necessary, together with information provision

Winter storm damage 2014 (Penn, 2014)








STIHL

Main Meadow and Pine Wood 2021

















Managed for people…and dogs!



Managed for people- Information boards



Managed for education











Managed for Wildlife





Managed for wildlife









Visitor Centre/ Entrance



- Classroom
- Geo Park - education
- Weather forecasting
- Toilets
- Parking
- Disabled facilities
- Café
- Seating
- Compost collection point

Wildlife Garden



Duckpond














Beech Wood

Beech Wood 2021



Beech Wood 2021



BEECH WOOD 2021










B20





Pond restoration – or not



Drying out of the alder woodland

FAR LAKE 2021





So what could we do differently?


FAR LAKE 2021



Beech wood – waterlogging from pond





Drainage channel



Channel clearing



Clearing leats of leaves & debris

Small meadow by Far Lake



Hay Meadow/ Wildflower Meadow




HAY MEADOW 2021

HAY MEADOW 2021















Management Issues: 2021





Maintaining Historical Link





Pavilion Lawn/Meadow





Significant flooding from Castle



















Managing water within the park















Invasive Species












Invasive species requiring active management







Coppicing and Pollarding







What do we do about moles?



Leaving deadwood

Evidence of Anthropogenic Threats







Litter and dog waste ‘hidden’ underneath fallen tree on the path





Vandalism?





- Next Week:
  - Grassland Management

