



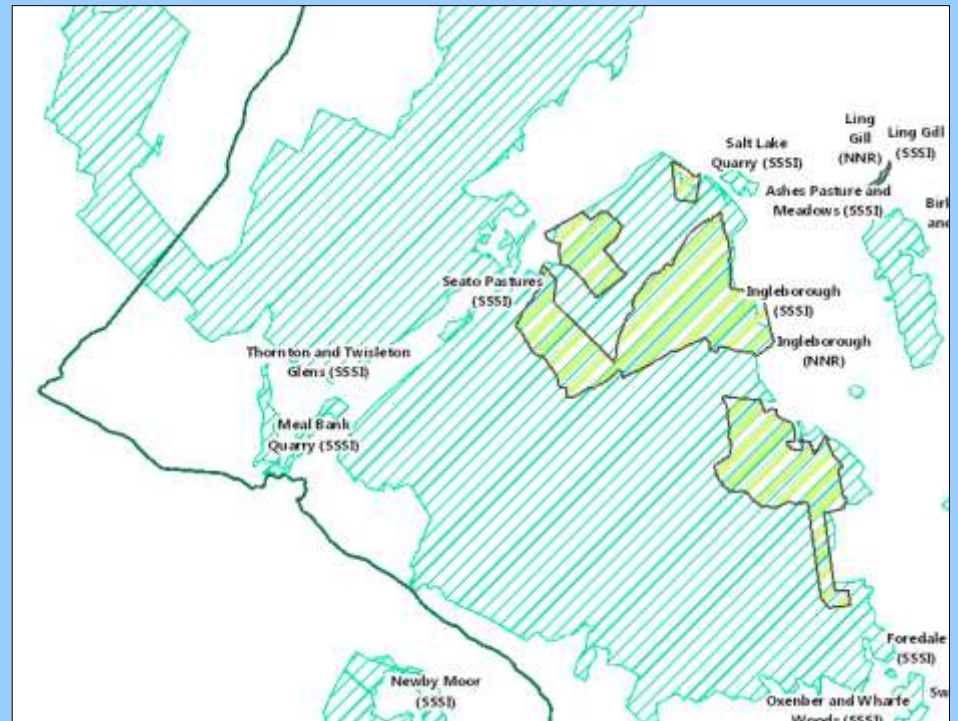
Yorkshire Dales – classification of protected areas into IUCN Management Categories

**Mark Fisher, November 2013
Wildland Research Institute**

Ingleborough National Nature Reserve

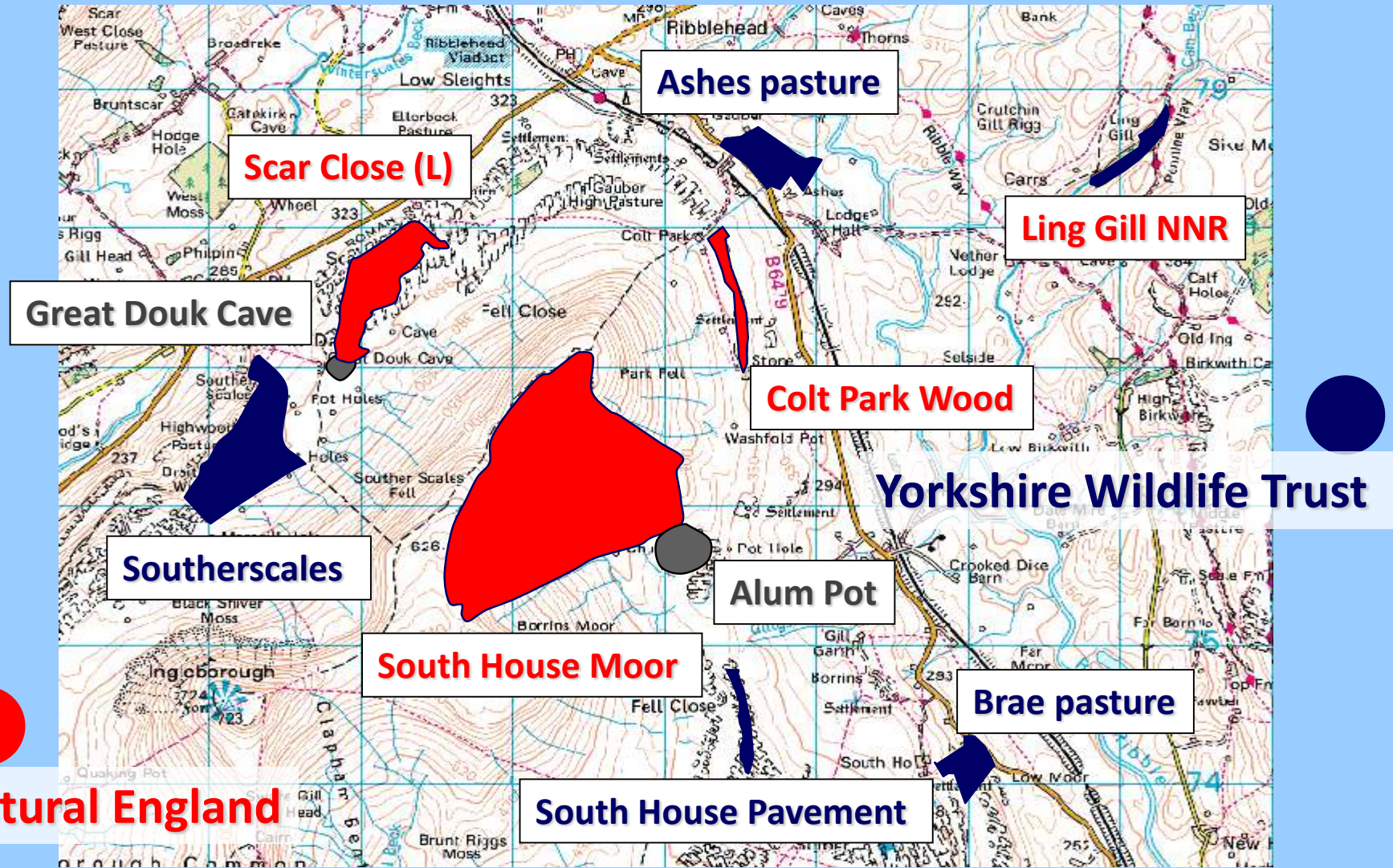
Nesting of protected areas

- Ingleborough NNR covers 1,012ha - officially opened 1993
- The NNR is inside the much larger Ingleborough SSSI
- the SSSI is inside the Yorkshire Dales National Park



- most of the NNR is **publicly owned** and managed by Natural England
- some areas are on long leases to NE
- two reserves in the NNR are owned and managed by the Yorkshire Wildlife Trust

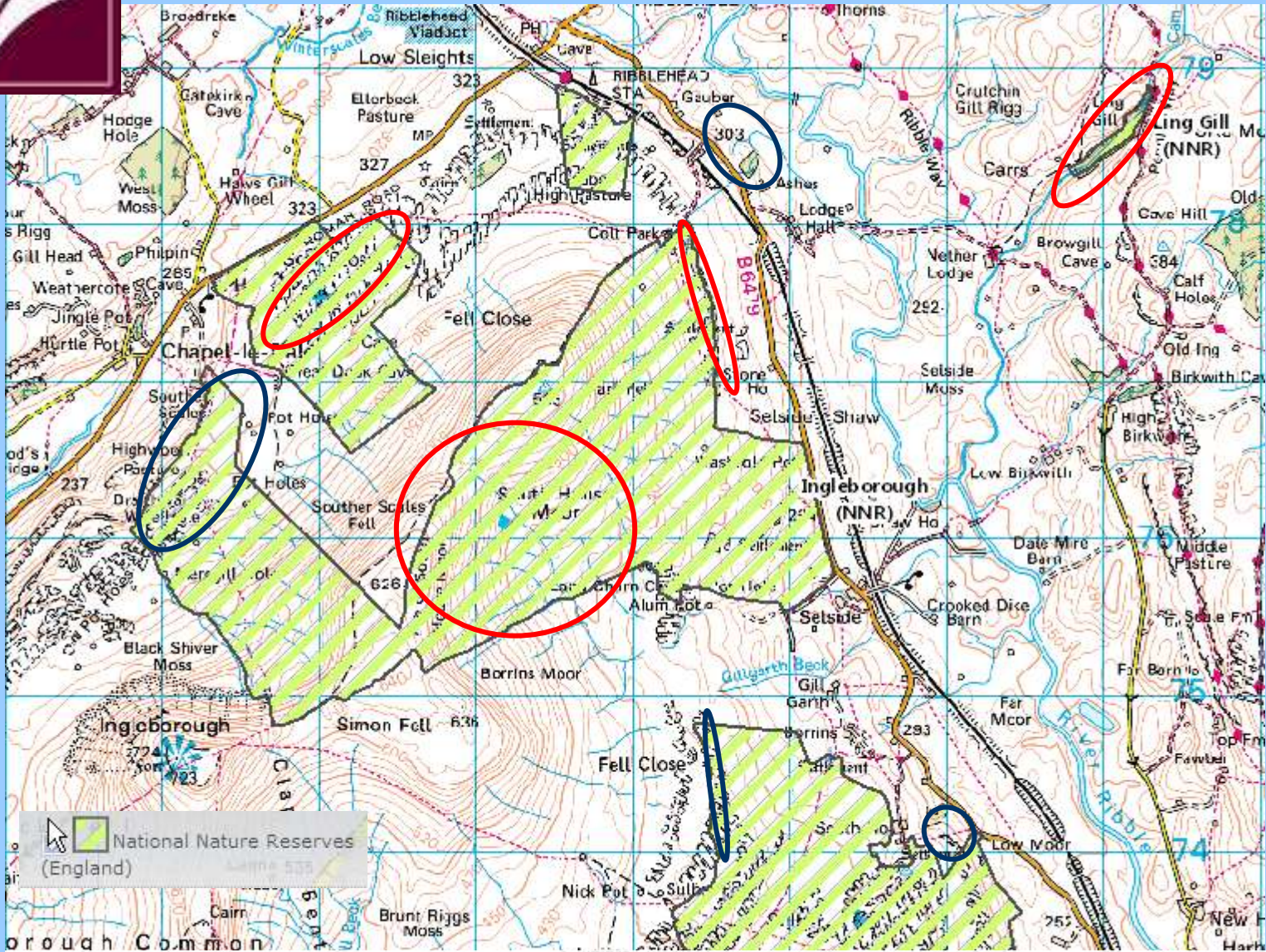
Land ownership (or leasing) of protected areas



What do we know about their **management**?

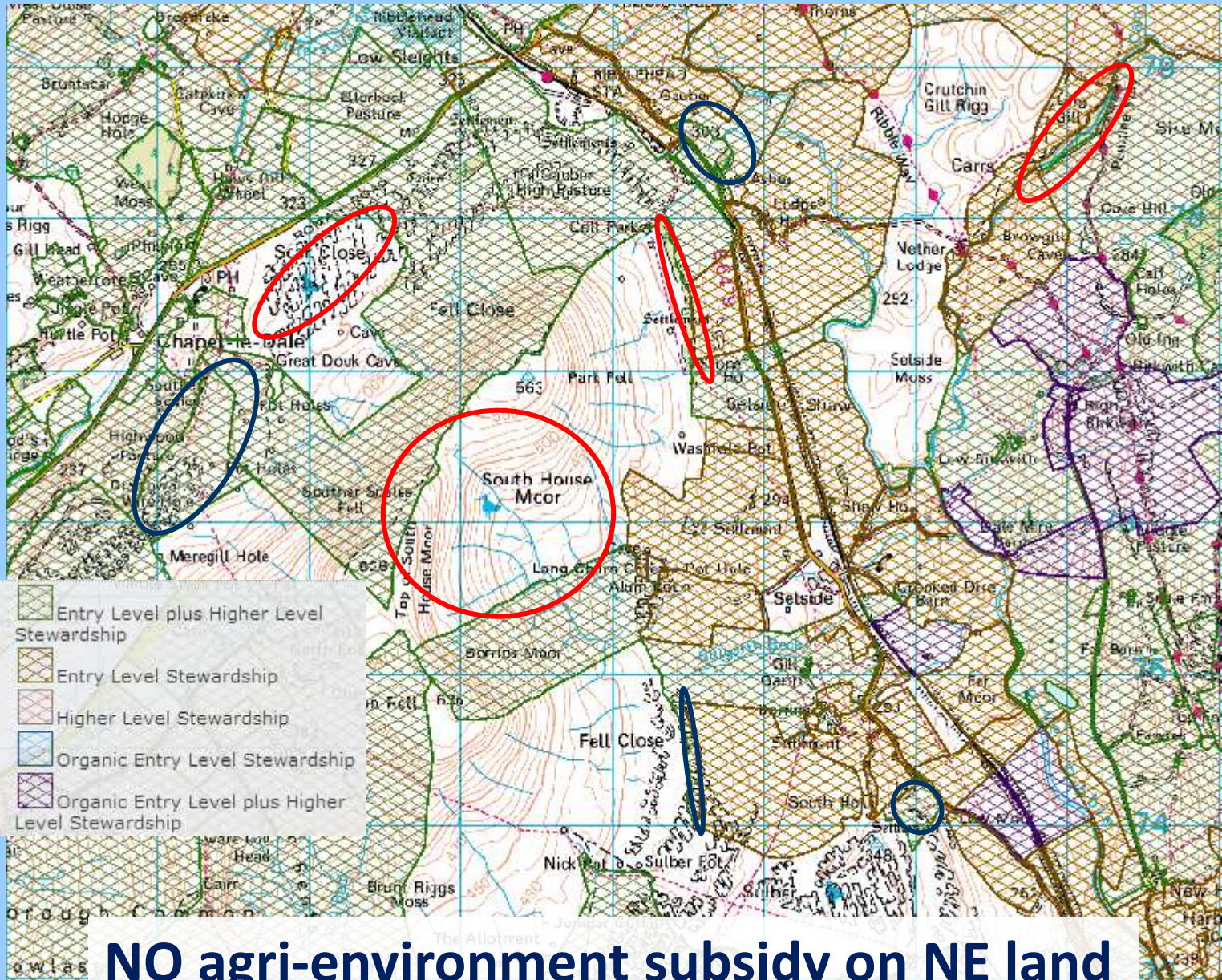


National Nature Reserve



Ashes and Braemar Pastures of YWT not in NNR

Agri-environment subsidy – stewardship Schemes



Summary of land based designations, access and schemes

	NNR	Access	HLS
Ling Gill	Y	N	N
Colt Park Wood	Y	N	N
Scar Close	Y	N	N
South House Moor	Y	Y	N
Great Douk Cave	Y	Y	Y
Ashes pastures	N	N	Y
Brae Pasture	N	N	Y
South House Pavement	Y	Y	Y
Southerscales	Y	Y	Y

- all are units in Sites of Special Scientific Interest (SSSI)
- none are registered common land

Is there any indication from this summary about how they are **managed – how **wild** they are?**



Yorkshire Wildlife Trust

Environmental Stewardship Agreements (England)	
Agreement Reference	AG00334945
Scheme	Entry Level plus Higher Level Stewardship
Customer Name	YORKSHIRE WILDLIFE TRUST
Town	York
Start Date	01/04/2011
Total Cost of Agreement (£)	129034.50
Amount Paid to Date (£)	55861.40
Total Area Under Agreement (ha)	61.61

Agri-environment subsidy payment for grazing over 10 years of the agreement



paid to graze



paid to graze



paid to graze and NOT to graze



paid to graze - grazing set to none!

Parcel - 5074762836 & 5074772801 (Southerscales)

January	February	March	April
Maximum average sward height of 2-15cm without overgrazing or poaching. Max = 40 sheep	Maximum average sward height of 2-15cm without overgrazing or poaching. Max = 40 sheep	0-40 sheep	0-40 sheep
May	June	July	August
20 sheep	10 cattle only	10 cattle only	10 cattle only
September	October	November	December
15 cattle & 50 sheep or 110 sheep	10 cattle & 50 sheep or 100 sheep	Maximum average sward height of 2-15cm without overgrazing or poaching. Max = 40 sheep	Maximum average sward height of 2-15cm without overgrazing or poaching. Max = 40 sheep

Max livestock units per hectare per year = 9.172

Parcel - 5076296184 (Brae Pasture)

January	February	March	April
Maximum average sward height of 2-15cm without overgrazing or poaching	Maximum average sward height of 2-15cm without overgrazing or poaching	Maximum average sward height of 2-15cm without overgrazing or poaching	No Stock
May	June	July	August
No Stock	No Stock	5-6 cattle	5-6 cattle
September	October	November	December
5-6 cattle	5-6 cattle	Maximum average sward height of 2-15cm without overgrazing or poaching	Maximum average sward height of 2-15cm without overgrazing or poaching

Parcel - 507726881 (Ashes Pastures)

January	February	March	April
Max = 20 sheep	Max = 20 sheep	Max = 20 sheep	No Stock
May	June	July	August
No Stock	No Stock	No stock 15-15 cattle	15-15 cattle
September	October	November	December
15-15 cattle & 20 sheep	15-15 cattle & 20 sheep	10-15 cattle & 20 sheep	Max = 20 sheep

South House Moor Re-wilding Project

“Within living memory the dwarf shrub communities on Ingleborough and the surrounding hills have been devastated by overgrazing”

Project objectives:

- demonstrate the ecological impact of **removing farming pressures**
 - upland vegetation communities re-establish and develop to a more **natural state**
 - recreate natural mixture of upland plant communities of **scattered native woodland** grading into **Juniper scrub** communities and **dwarf shrub moorland**
- sheep grazing ceased Summer 1999
 - 10,000 native trees and shrubs planted in copses and along gill sides (10ha) Autumn 1999-2002
 - Juniper and willow scrub will be established on the **scree slopes**
 - first generation trees act as **seed parents** so that **natural regeneration** can take over in the long term

TROPHIC CASCADES – between grasses, slugs, field voles, common shrews and short-eared owls

Landscape in transition to greater **structural complexity**



SSSI Unit 16



Ling Gill National Nature Reserve

- **ancient** ash woodland in a steep-sided gill
- **inaccessibility to grazing** is probably the reason for its survival
- **Ancient Woodland Indicator** plants, freshwater crayfish



Wild! Rocks, water, woodland

Colt Park Wood – an NNR before Ingleborough

- **ancient** ash wood on the deeply fissured limestone pavement
- **luxurious growth** of lichens, moss, ferns and carpets of wild flowers like golden saxifrage, shining cranesbill, woodruff and wood sorrel
- **grazing excluded**



deer toe print



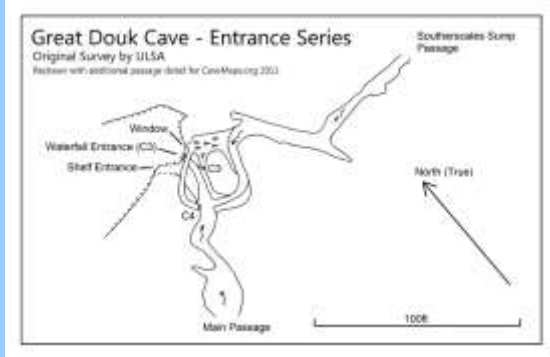
SSSI Unit 8

High scar to the east keeps sheep out



Wider grikes are roe deer avenues!

Great Douk Cave



SSSI Unit 87

Great Douk is walled off, the limestone pavement above the cave system is fenced



Cave entrance is in a large collapsed depression



Water flow comes in and quickly disappears

Ecological restoration through removing grazing



Limestone walk
Ingleborough National Nature Reserve

Scar Close

Glance to your right to see wooded Scar Close. Grazing livestock have been excluded for many years allowing ash trees and hazel bushes to escape from the confines of the grikes.

This area now looks more like the landscape which existed prior to man's clearance of the upland woodlands that once covered the Yorkshire Dales. English Nature and other wildlife organisations are encouraging more land to move to a semi-wooded state, richer in plant, bird and insect life.



Ungrazed since 1974

Species of Scar Close and Southerscales

Species return mediated through the natural force of **wind**, and from **birds** and **mammals**



Southerscales **grazed**

Ash	Lesser meadow rue
Baneberry	Limestone oak fern
Blackthorn	Raspberry
Dog's mercury	Rigid buckler fern
Figwort	Rowan
Fragrant orchid	Sycamore
Gooseberry	Violet
Hawthorn	Welsh poppy
Hazel	Wood anemone
Heart's tongue fern	Wood sage
Ivy	Wood sorrel

Ecological restoration - reclaiming soil, humus, wildlife, natural processes



Scar Close **not grazed**

Angelica	Climbing corydalis	Heather	Solomon's seal
Ash	Daffodil	Honeysuckle	St John's wort
Baneberry	Devil's bit scabious	Ivy	Stone bramble
Bilberry	Dog rose	Juniper	Strawberry
Birch	Dog's mercury	Lesser meadow rue	Sycamore
Bird cherry	Early purple orchid	Lily of the valley	Valerian
Birds eye primrose	Elder	Limestone oak fern	Violet
Birds foot trefoil	Field scabious	Meadow sweet	Water avens
Blackthorn	Figwort	Melancholy thistle	Welsh poppy
Bloody cranesbill	Globe flower	Milkwort	Willows x 3
Bluebell	Greater burnet	Orpine	Wood anemone
Bracken	Green spleenwort	Primrose	Wood cranesbill
Brittle bladder fern	Guelder rose	Raspberry	Wood sage
Bugle	Hard head	Red currant	Wood sorrel
Butterwort	Hawthorn	Rigid buckler fern	Yarrow
Cinquefoil	Hazel	Rock rose	Yew
Cowberry	Heart's tongue fern	Rowan	

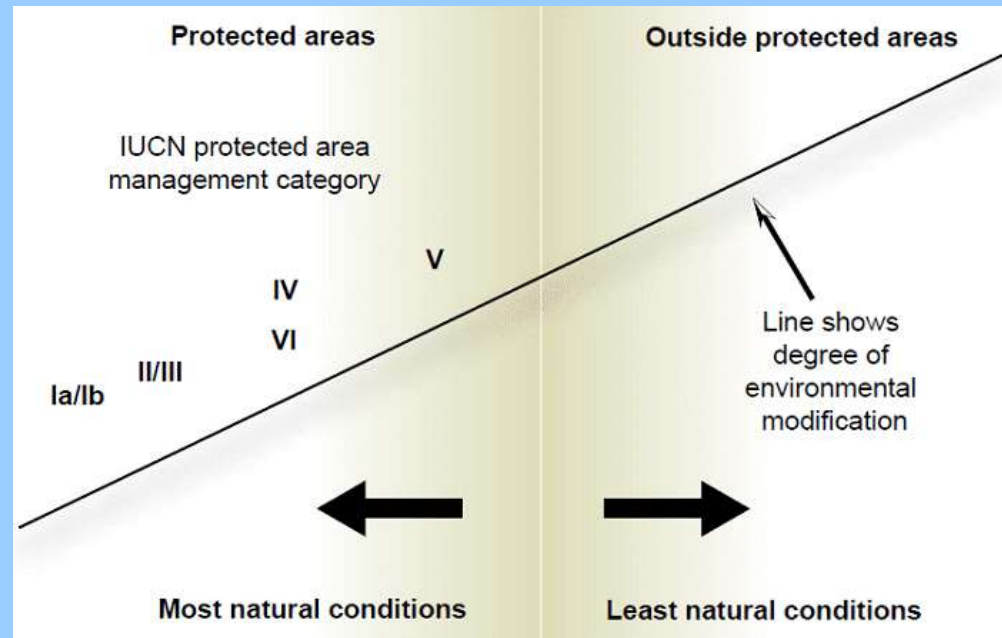
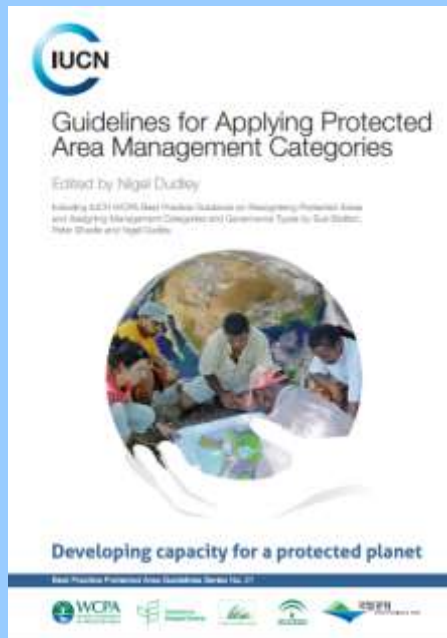


Summary of access and management approach

	Access	HLS	GRAZED
Ling Gill	N	N	N
Colt Park Wood	N	N	N
Scar Close	N	N	N
South House Moor	Y	N	N
Great Douk Cave	Y	Y	N
Ashes pastures	N	Y	Y/N
Brae Pasture	N	Y	Y
South House Pavement	Y	Y	N
Southerscales	Y	Y	Y

IUCN Categories are based on management approach – can we categorise these areas?

Classification within IUCN Management Categories

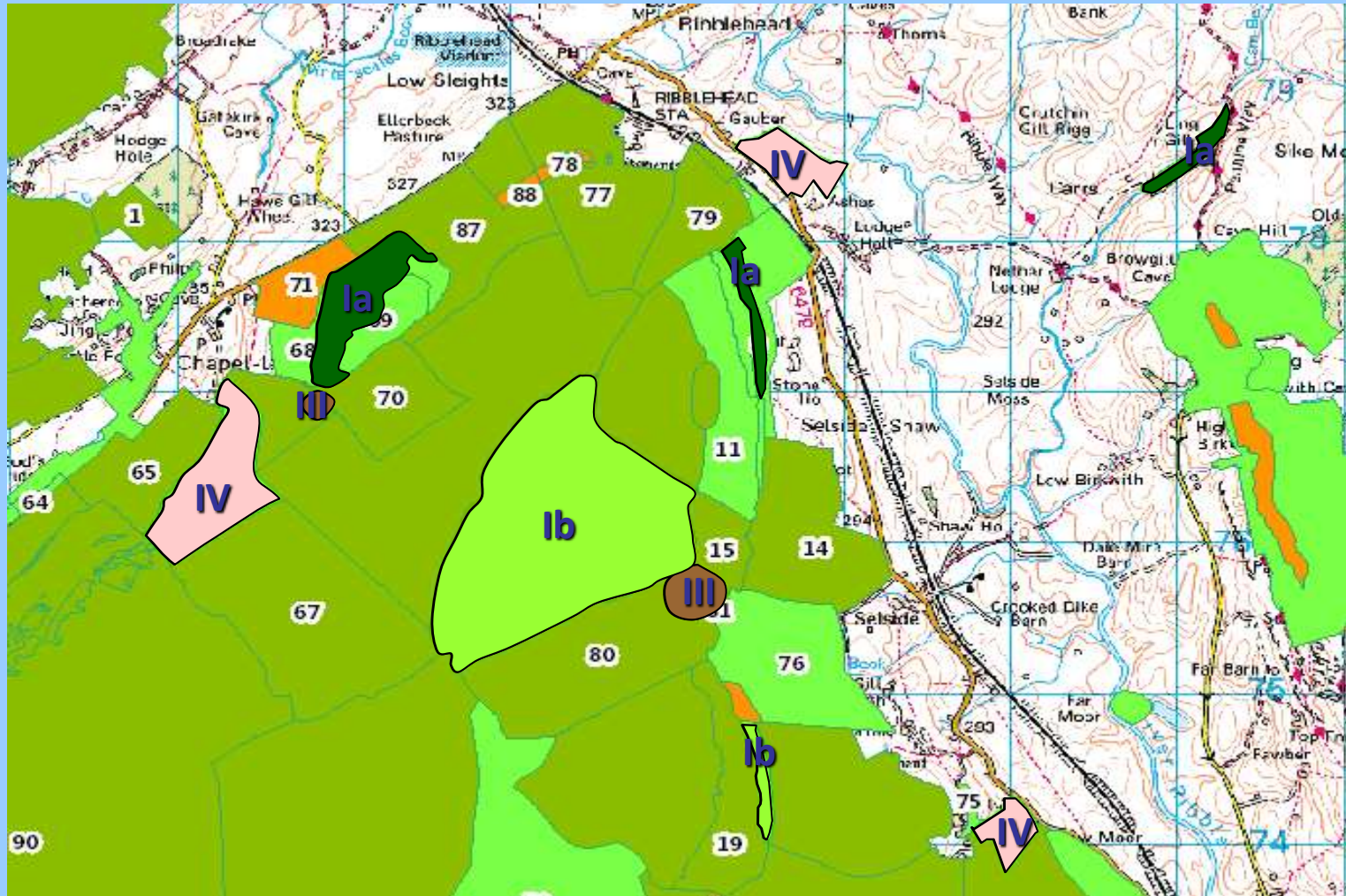


CATEGORY Protected area name

Area managed for

Ia&b	Strict Nature Reserve / Wilderness Area	Strict protection without & with access
II	National Park	Ecosystem conservation and recreation
III	Natural Monument	Conservation of natural features
IV	Habitat/Species Management Area	Conservation through active management
V	Protected Landscape/Seascape	Landscape/seascape conservation and recreation
VI	Managed Resource Protected Area	Sustainable use of natural ecosystems

IUCN Management Categories for protected areas



Does our legislation have **strictly protected areas**?