

Native Breeds Nature and Farming

Lawrence Alderson

lawrence@cltd.demon.co.uk

www.lawrencealderson.com



Native Breeds

The UK has 157 native breeds (UK Country Report 2002) mainly with localised origin:

- Cattle 27
- Sheep 61
- Goats 3
- Horses and ponies 18
- Pigs 10
- Poultry 38

Localised Breeds

Beef cattle in UK

Shetland

Highland

Angus

Beef Shorthorn

Chillingham

Galloway (2 breeds)

Irish Moiled

Shorthorn (several)

Red Poll

Longhorn

Welsh Black

White Park

Gloucester

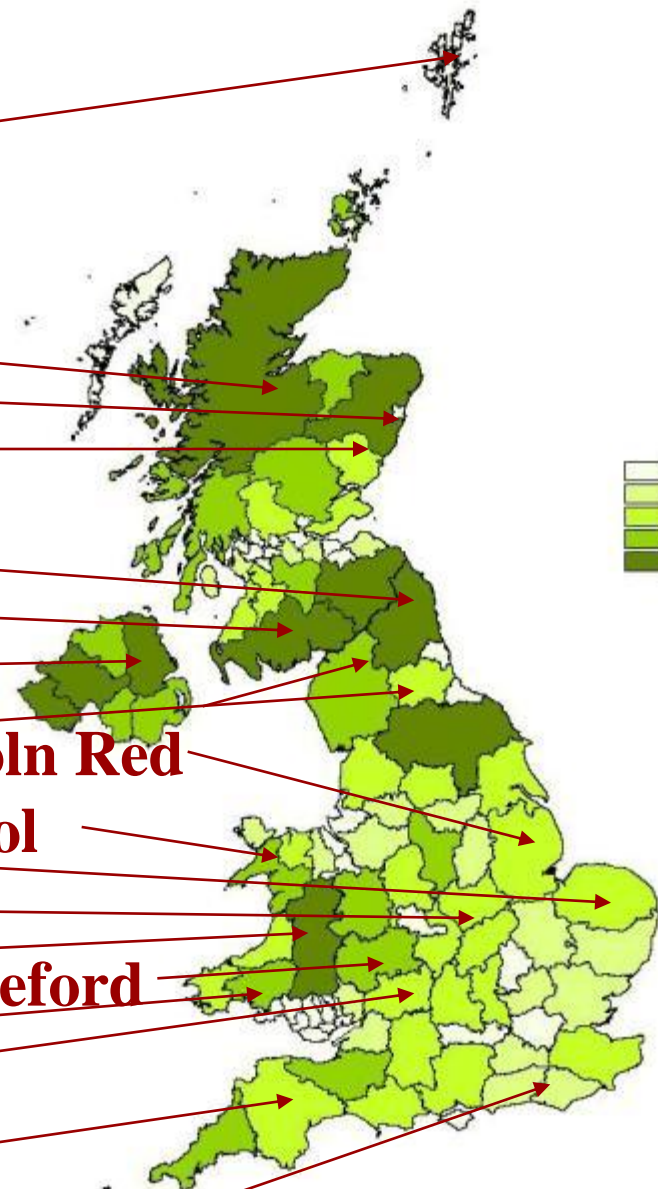
Devon (2 breeds)

Lincoln Red

Vaynol

Hereford

Sussex



Nature and Farming

Why native breeds?

- **Local adaptation**: native breeds are suited to extensive systems of management and lower quality of grazing
- **Profit and Product quality** – premiums from speciality markets
- **Holistic conservation** of native heritage: FAnGR are part of the inherited wealth of native biodiversity



Local adaptation Damara desert sheep and tick-resistant Nguni cattle in South Africa

Native habitat: Conservation of Shetland cattle on the Islands and NDS in the Dales



Profit (added-value) Grey Steppe cattle on Hungarian puzsta are a tourist attraction



Local Adaptation in Britain

- **Extreme example** – seaweed-eating sheep
- **Moorland** – blackfaced breeds on heather moors
- **Hardiness** – Herdwicks and Highlands
- **Grazing behaviour** – White Park and Blonde d’Aquitaine cattle



Conservation Grazing

Not a new concept; **GAP** established the value of grazing with native breeds:

- Grassland, Heath and Woodland
- Wetlands, Bogs and Fens
- Sea cliffs



Native Adaptation

molinia control - interpretation

- **Molinia control** project on heather moor: Hebrideans prefer molinia; Swaledales heather; would the result be repeated when both breeds are localised to environment?
- Would sheep plus cattle be a better option? Reducing stocking rate of sheep increased molinia by 40%; Adding cattle to existing sheep reduced molinia by 50%



Farming (Non)Profit in UK

- **UK: a primary industry in decline**
agriculture & associated industries 8% GDP;
agriculture alone 0.7% GDP
- **EU: reducing expenditure on agriculture**
1993 **65%** budget; 2003 **50%**; 2013 **33%** (prov)
- **Poor profitability:** cattle, sheep and LFA lowest sectors; many under £10K pa.
- **Declining trend** in number of livestock in last 10 years: beef cattle down 20%; sheep down 25%

Native Breeds at Risk

- Bucking the trend
- increase in breed numbers in last 10 years; no breeds lost since 1973
- advantage under agri-environment schemes; incentive payments to encourage native FAnGR
- added-value from special quality products in niche markets; premium prices for traditional breeds

Summary of native breeds environment and profit

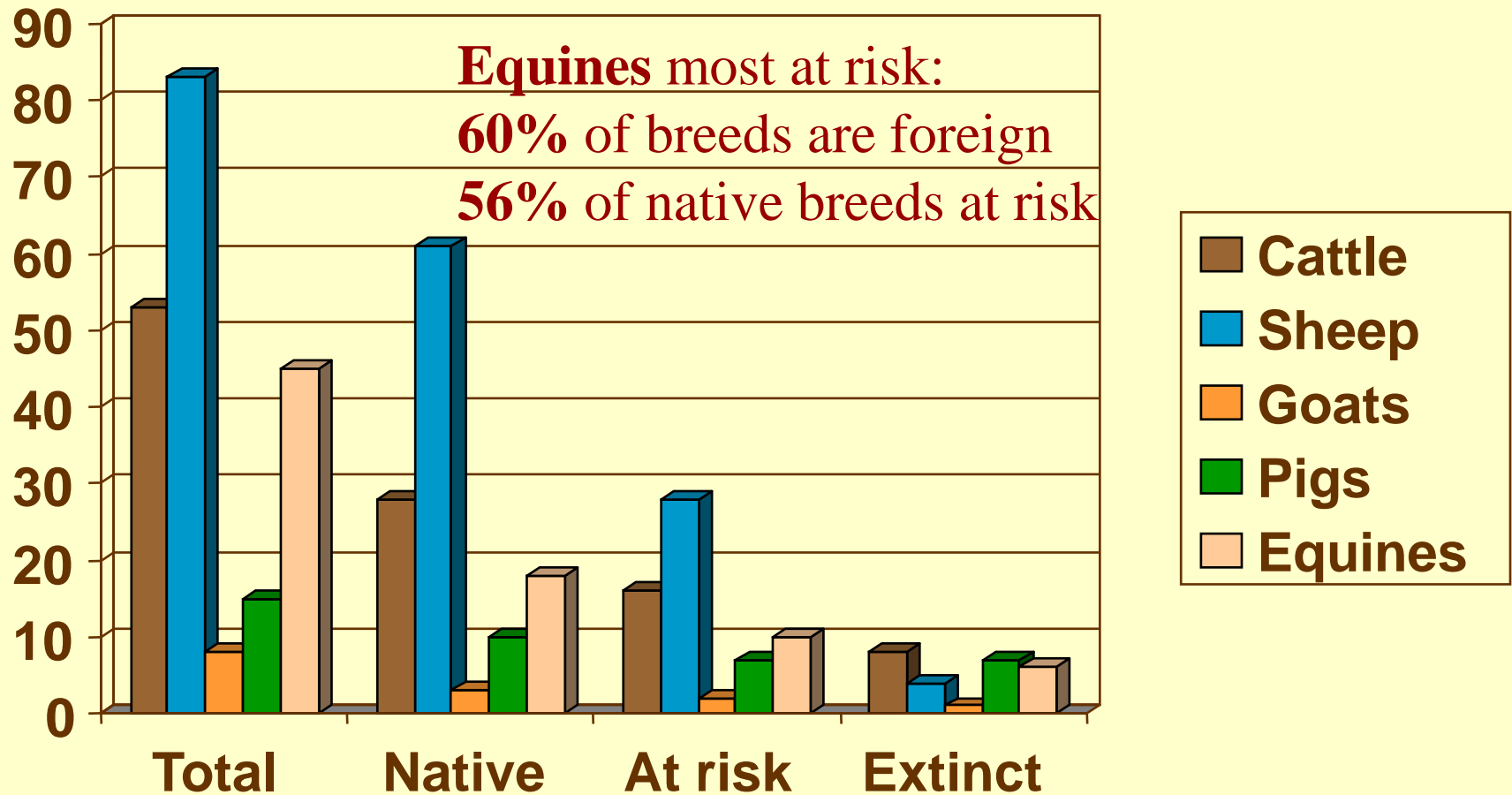
- **Native adaptation** to natural environment increasingly important
- **Extensive low-cost systems** can be relatively profitable
- **Niche markets** are a profitable outlet
- **Agri-environment** incentive payments
- **Environmental value** through emphasis on C sequestration and biodiversity

Heritage - Holistic Conservation



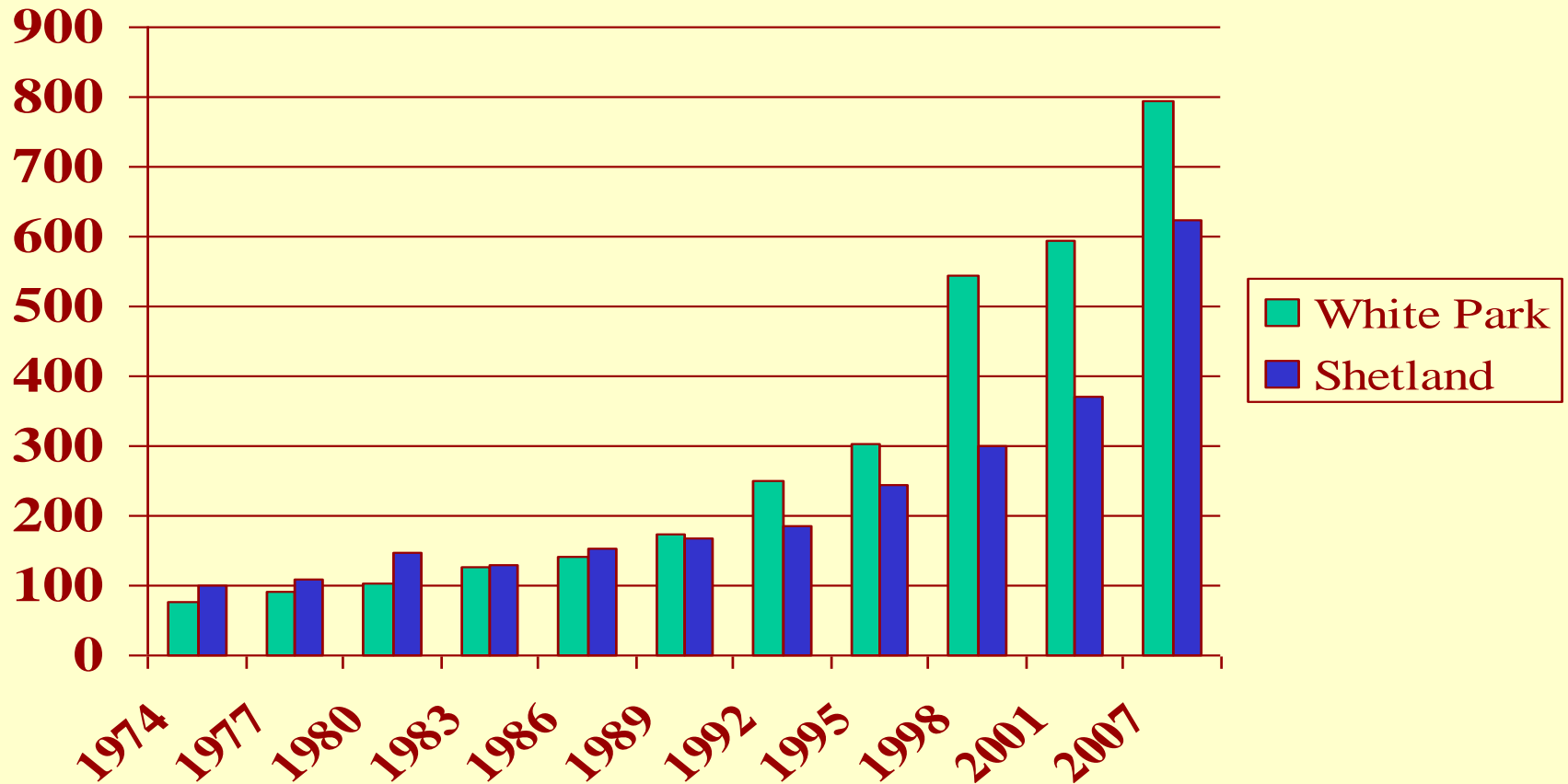
Holistic Conservation

threat of non-native breeds



Trends: RBST effect

- Endangered breeds supported by **RBST** since 1973: example of two UK cattle breeds (breeding females)



Breed Case Study

White Park cattle

Native heritage –
ancient breed (856AD)

Commercial value –
quality beef (Sir Loin)



Profit: cattle uplands blueprint

- Extensive systems can yield better returns than intensive beef



| System | Age at slaughter (days) | Wt at slaughter (kg) | KO % | Price/kg (p) | Profit /cow (£) | Profit/GLU (£) |
|----------------|-------------------------|----------------------|-------------|--------------|-----------------|----------------|
| Extensive beef | 1033 | 583 | 55.4 | 212 | 431 | 167 |
| Intensive beef | 411 | 501 | 59.8 | 189 | 38 | 27 |

Environment

White Park cattle

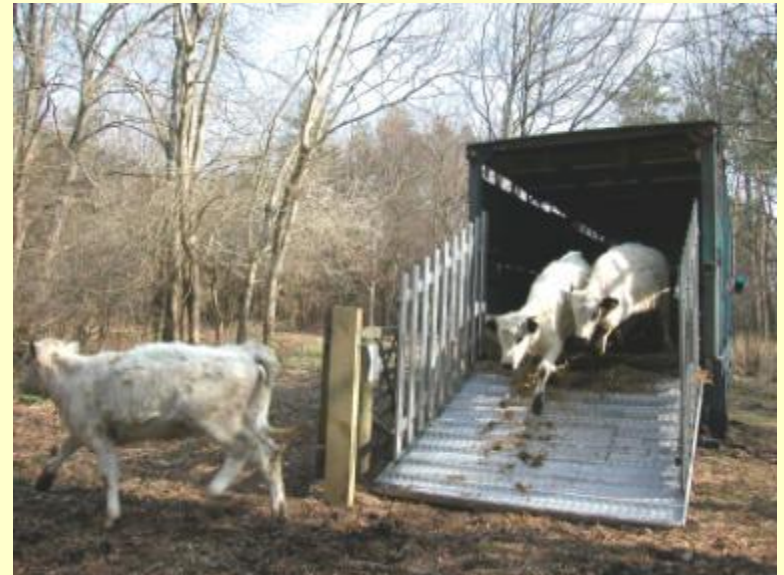
Local adaptation –

- extensive systems of production
- carbon balance (GHG)
- efficiency/profitability
- conservation grazing; woodland, wetlands, chalk heathland, grassland

Conservation Grazing

Savernake Forest: ‘glading’ project; recreation of ancient pasture-woodland systems; joint initiative of EN, WIGI, Forestry Commission, Savernake Estates, and White Park cattle (Dynevor herd); 10 animals

Salisbury Plain SSSI:
natural system, no shelter,
no extra feed; 100 animals



Wetlands: Somerset levels (now terminated); 200 animals

Conclusions

Advantages of native FAnGR:

- ~ official recognition of value of native FAnGR ~
- ~ native adaptation to extensive low-cost systems
- ~ payments under agri-environment schemes
- ~ added-value from speciality products

Disadvantages for native FAnGR:

- ~ downturn in overall livestock sector
- ~ bureaucracy hits smaller units harder
- ~ biosecurity regulations post BSE and FMD
- Conservation of native FAnGR is a priority

Thank you for your interest

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