

# Managing Cattle in Woodlands



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# Location & Environment

- TGTF NNR – WT, RSPB, FES & BP - Katrine & Arklet
- Elevation – 130m to 750m AOD
- Rain Fall - Average 2300mm pa
- Katrine & Arklet history – AWP – Intensive Ag.
- Overnight removal of sheep – circa 2001 – Mol.





# New native woodlands & natural regeneration

- 900Ha existing woodland
- 1100Ha natural regeneration target
- 800Ha new native planted – 41% scots pine, 20% oak, 20% alder, 6% birch, 3% ash, 1% each of Juniper, Hawthorn, Aspen, Rowan, Cherry, Grey Willow
- 5 years of planting, over 1million cell-grown trees, local seed sources used
- New planting protected by deer fences
- Balance: 6.5k Ha PO, AWP, Open Hill



# Grazing at Loch Katrine

- IRO 6.5k Ha open ground – majority above 500m
- 1k Ha enclosed w/fences
- Improve sward diversity in open habitats & understories, sustain & rejuvenate old WP and create new WP
- Integration of existing woods, new planted, natural regen. (ungrazed), natural regen. (grazed), & priority open space (grazed) – gives habitat mosaic
- Cattle chosen for their non-selective grazing habits, traction influence, dunging, ability to utilise low quality forage
- HI cows chosen for their size, hardiness, good on feet, large gut equiv., & willingness to forage
- WS bulls used to produce hardy native bred calves , in demand & valuable, not sore on cows or condition
- Spring & early Summer - high ground – impact on molinia – short periods/high density
- Mid Summer – woodlands & fringes - bracken, sward diversity, minimal browsing - short periods/medium density
- Autumn – Lower priority open ground – regen. Control, eg blanket bogs/vistas – short periods/high density
- Winter & Calving - SIG & AWP – shelter, impact on birch & bracken – longer periods /low densit



# Setting a grazing plan

- Baseline condition/Structure class
- Desired condition/Structure class
- Target vegetation
- Optimise grazing impact by altering density/season/period/freq.
- Continuous monitoring



# Practicalities

- Checking
- Feeding
- Calving



# Mature Native Woodland

- Lower carrying capacity vs open habitats
- High shelter value





# Regenerating Woodland

- Utilisable as winter shelter
- Fodder, mechanical scouring, self-medication
- Careful stocking rates and timings – but can be integrated into a whole farm plan as utilisable for livestock
- Break periods & variety of management





# Wood Pasture

Higher carrying capacity than other woodland sites, with the same range of benefits to livestock.

Maintaining open areas within a forested landscape.





# Is it profitable?

- Increase plant/habitat diversity
- Reduce bracken & regenerate native woodlands
  - - Carrying capacity LU/Ha
  - + longer growth season
  - + health + productivity/longevity + lower maintenance
  - = Increased Profitability/LU?



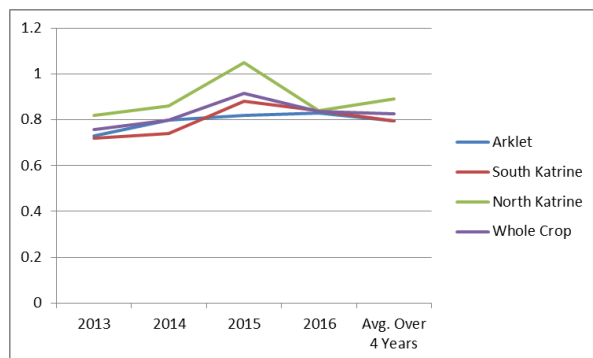


# Shelter & aspect

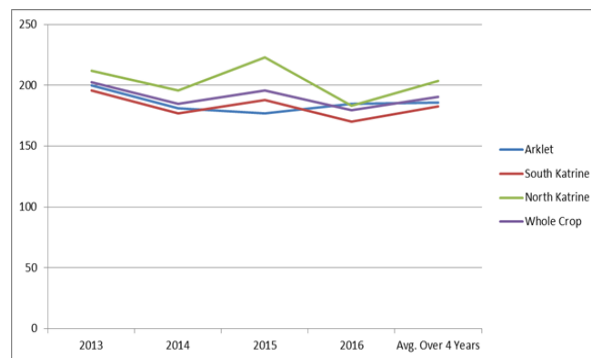
- 3 grazing areas with equivalent average altitude
  - North Katrine - South Facing, w/shelter
  - North Arklet - South Facing, no shelter
  - South Katrine - North Facing, w/shelter
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- Graphs show average calf DLWG, calf wean weights & cow weights from each location 2013-2016



Calf DLWG



Calf wean weight



Cow weight at weaning

