Update on the conservation status of six rare vascular plants

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EU Habitats Directive

- Report every 6 years on conservation status of species and habitats listed on the Directive
- 2015-2018: Rare plants monitoring survey carried out by BEC Consultants on behalf of NPWS to assess conservation status
- Annex II species: require designation of SACs for their conservation
- Annex V species: relates to species liable to collection in the wild
The Six Vascular Plant Species

• Annex II Killarney fern (*Trichomanes speciosum* = *Vandenboschia speciosa*)
• Annex II Marsh saxifrage (*Saxifraga hirculus*)
• Annex V Clubmosses: four “*Lycopodium*” spp.
  – Alpine clubmoss (*Diphasiastrum alpinum*)
  – Fir clubmoss (*Huperzia selago*)
  – Stag’s-horn clubmoss (*Lycopodium clavatum*)
  – Marsh clubmoss (*Lycopodiella inundata*)
• Collected for decorative purposes in parts of the world, e.g. North America, where they are much more common (e.g. *L. clavatum*)
Killarney Fern

• Damp, shady, humid habitats (e.g. ravine woodlands)
• Very sensitive to drying out
• Distribution largely western
• Stronghold in Kerry but largest single population is in Waterford
• Collected by the Victorians
• Red List: Least Concern (Wyse Jackson et al., 2016)

Range: Favourable, stable
Population: Favourable, stable
Habitat for the species: Favourable, stable
Pressures/Threats: None significant
Future prospects: Favourable
Overall Conservation Status: Favourable, stable

Photos by Emer Ní Dhúill
Info courtesy of NPWS
Marsh Saxifrage

- Very restricted habitat: Mineral flushes in blanket bogs
- Habitat is very wet, sensitive to trampling (livestock, ecologists!)
- Restricted distribution: Co. Mayo, Co. Sligo
- Flora (Protection) Order, 2015 (S.I. No. 356/2015)
- Red List: all-Ireland population assessed as Near Threatened (Wyse Jackson et al., 2016)

Range: Favourable, stable
Population: Favourable, stable
Habitat for the species: Favourable, stable
Pressures/Threats: None significant
Future prospects: Favourable
Overall Conservation Status: Favourable, stable

Photo by Maria Long
Info courtesy of NPWS
Alpine clubmoss
(Diphasiastrum alpinum)

- Alpine heath
- Habitat often rocky, sparsely vegetated
- Distribution is altitudinally restricted
- Red List: all-Ireland population assessed as Near Threatened (Wyse Jackson et al., 2016)

Range: Favourable, stable
Population: Favourable, stable
Habitat for the species: Favourable, stable
Pressures/Threats: None significant
Future prospects: Favourable
Overall Conservation Status: Favourable, stable
Fir clubmoss
(Huperzia selago)

• Much more widespread than the other clubmosses
• Generally upland distribution, mostly above 300 m, but also on lowland bogs
• Acidic, nutrient-poor, sandy or peaty soils
• Threats to the habitat from overgrazing and trampling by livestock

Range: Favourable
Population: Favourable
Habitat for the species: Inadequate
Pressures/Threats: Overgrazing
Future prospects: Inadequate
Overall Conservation Status: Inadequate

Photo by Maria Long
Info courtesy of NPWS
Stag’s-horn clubmoss
(*Lycopodium clavatum*)

- Habitat similar to Alpine clubmoss: high-altitude Alpine heath
- Red list status: Near Threatened (Wyse Jackson *et al.*, 2016)
- Current pressures from hiking, unsuitable grazing; future threats may come from forestry expansion

Range: **Favourable**
Population: **Inadequate**
Habitat for the species: **Inadequate**
Pressures/Threats: **Inappropriate grazing; excessive disturbance**
Future prospects: **Inadequate**
Overall Conservation Status: **Inadequate**

Photo by Rory Hodd
Info courtesy of NPWS
Marsh clubmoss  
(*Lycopodiella inundata*)

- Lake margins, open patches on peaty soil in heathland, flushes and bog; Lowland
- Moderate levels of disturbance beneficial (inundation, grazing, trampling): maintain open habitat
- Rarest clubmoss: FPO species
- Red list status: Vulnerable (Wyse Jackson *et al.*, 2016)
- No obvious current pressures but drainage and agricultural improvement would be damaging

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**Range:** Favourable  
**Population:** Favourable  
**Habitat for the species:** Favourable  
**Pressures/Threats:** None significant  
**Future prospects:** Favourable  
**Overall Conservation Status:** Favourable
Special acknowledgements for data

- BSBI (2018) Plant records extracted from the BSBI’s Distribution Database following data request.
- Rare plants monitoring survey carried out by BEC for NPWS – five Irish Wildlife Manuals forthcoming during 2019 (including two bryophyte species also surveyed).