Meadow-grasses (*Poa* spp.)
Vegetative characteristics of *Poa* spp.

- Leaf tip is boat-shaped/hooded/keeled – leaves cannot be flattened without splitting the tip
- Shoot base and stems at least slightly flattened
- Young leaves folded in the shoot, not rolled
- Usually hairless (but see *Poa humilis*)
- “Tramlines” – 2 grooves running either side of midrib on upper leaf surface
- No cross-veins on leaves or sheaths (contrast *Glyceria*)
- Most are perennial, just one annual (*P. annua*)
Floral characteristics of *Poa* spp.

- Inflorescence is always a panicle
- Spikelets contain 2 or more florets
# Poa species in Ireland

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>No. of records in NBDC*</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Poa annua</em></td>
<td>Annual Meadow-grass</td>
<td>6,536</td>
</tr>
<tr>
<td><em>Poa trivialis</em></td>
<td>Rough Meadow-grass</td>
<td>5,911</td>
</tr>
<tr>
<td><em>Poa pratensis</em></td>
<td>Smooth Meadow-grass</td>
<td>3,733</td>
</tr>
<tr>
<td><em>Poa humilis</em></td>
<td>Spreading Meadow-grass</td>
<td>919</td>
</tr>
<tr>
<td><em>Poa nemoralis</em></td>
<td>Wood Meadow-grass</td>
<td>169</td>
</tr>
<tr>
<td><em>Poa palustris</em></td>
<td>Swamp Meadow-grass</td>
<td>46</td>
</tr>
<tr>
<td><em>Poa compressa</em></td>
<td>Flattened Meadow-grass</td>
<td>32</td>
</tr>
<tr>
<td><em>Poa alpina</em></td>
<td>Alpine Meadow-grass</td>
<td>19</td>
</tr>
<tr>
<td><em>Poa bulbosa</em></td>
<td>Bulbous Meadow-grass</td>
<td>4</td>
</tr>
<tr>
<td><em>Poa chaixii</em></td>
<td>Broad-leaved Meadow-grass</td>
<td>3</td>
</tr>
<tr>
<td><em>Poa infirma</em></td>
<td>Early Meadow-grass</td>
<td>3</td>
</tr>
</tbody>
</table>

* National Biodiversity Data Centre: [https://maps.biodiversityireland.ie](https://maps.biodiversityireland.ie)
Poa annua – Annual Meadow-grass

https://database.bsbi.org/maps/
*Poa trivialis* – Rough Meadow-grass

https://database.bsbi.org/maps/
Poa pratensis – Smooth Meadow-grass

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Poa annua
Annual Meadow-grass

Small, annual grass – usually dies back after flowering
Flowers more or less all year round
Likes trampled areas, e.g. paths, amenity grassland
Poa annua
Annual Meadow Grass

- Spikelets
- Inflorescence a spreading panicle
- Lemma with papery margin
- Some leaves transversely wrinkled
- Branches with clusters of spikelets
- Short leaf blade on stem
- Unequal glumes No awns
- Ligulea rounded 2.6mm long
- 2 or more florets
Poa trivialis - Rough Meadow-grass

- Triangular flower head
- Triangular, pointed ligule
- Triangular leaf (tapering towards tip)
- Tufted (or shortly stoloniferous)
- Leaves bright green, glossy on the back
- Wide range of conditions tolerated
  - Damp or humid, e.g. wet grassland
  - Bare, waste ground, may be weedy in arable fields and cultivated grassland
  - Open woodland, hedgerows, etc.
  - **Dislikes** very acid, dry or infertile soils
Leaf sheath colour

Poa trivialis sometimes develops purple colour on leaf sheaths, especially if recolonising bare ground.

Not a very reliable character on its own – other species also have purple sheaths. DO NOT CONFUSE with Glyceria fluitans – always check to see if cross-walls are present. If so, it’s Glyceria.
Poa pratensis - Smooth Meadow-grass
**Poa pratensis (sensu stricto)**

- Leaf is parallel-sided for most of its length, then narrows fairly abruptly to the tip
  - Fold leaf over in half (top to base) to see if upper third is same width as lower third
- Ligule is short (*paltry*)
- Spikelets of gone-over heads droop
- Colour is more blue-green than bright green
- Rhizomatous; culms usually in dense tufts at the nodes of the rhizome
**Poa humilis** – Spreading Meadow-grass

- Taxonomically problematic: Has alternated between a *Poa pratensis* sub-species and a species in its own right
  - Old names include *Poa pratensis* ssp. *irrigata*, *Poa subcaerulea*
- Currently recognised as a separate species
- If it looks like *Poa pratensis* but is in a damp or coastal habitat, consider *Poa humilis* and look for distinguishing characteristics
Poa pratensis

Poa pratensis subsp. pratensis

Poa humilis

Poa pratensis subsp. irrigata

A, habit; B, ligule; C, spikelet; D, lemma in profile; E, palea; F, anther.
Poa pratensis vs. Poa humilis

- Veins on glumes
  - *P. pratensis*: Lower glume usually has only 1 vein
  - *P. humilis*: Both glumes have 3 veins

- Size of glumes
  - *P. pratensis*: Lower glume of *P. pratensis* is slightly but noticeably smaller
  - *P. humilis*: Glumes are more or less the same size

- Shape of glumes
  - Glumes of *P. humilis* are more sharply pointed than those of *P. pratensis*

- Hairs on sheath on *P. humilis* – variable character
**Poa nemoralis**

*Wood Meadow-grass*

- Woods and shady places
- Delicate grass, leaves soft, not firm
- Tufted
- Leaves with tramlines visible only near apex
- Blackish nodes
- Very common in Britain, much less so in Ireland where it is not native (introduced, e.g. via sheep wool)
Image acknowledgements


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Go raibh míle maith agaibh!
Thank you!