...yes - it is *Lemna gibba*, even if it is flat! Tackling common Duckweed dilemmas

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**Duckweed identification pointers and tips**

- **Colour** is important - check mainly green fronds to see where any red colour starts to develop
- **Frond outline** is very important: asymmetry, widest point, shape of apex, etc.
- **Frond size** – Caution minute isn’t always *minuta*! All species produce smaller fronds seasonally which may lack roots and which can persist all year
- **Lacunae** - hold a frond up to the light and check for large air-spaces showing through the green chlorophyllous cells
- **Nerves** seem almost impossible to use in most species unless the chlorophyll can be cleared from fronds – all small plants have just one!
- **Papillae** when present (relative sizes, numbers and position) can be useful features but treat with caution

**The problem species**

- *minuta* – grey-green, translucent, symmetric ellipses,
- *valdiviana* - very pale, translucent, forming butterflies, a bit asymmetric, long visible vein
- *turionifera* like small *gibba*, flat, rather rounded, becoming dirty red-brown but never swelling, with small lacunae, often reddening at root and with papules above like little horseshoe crabs.

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**Common Errors/Issues**

- Over-recording of *L. minuta* for small examples of *L. gibba* and *L. minor* – *minuta* should be thin/translucent, grey-green and neat ellipses.
- Over recording of *L. minor* for flat *L. gibba* – check frond shape and presence of lacunae. *L. gibba* is easily our commonest species!
- Over-looking of *L. turionifera* – easy to ID if typical but most plants lack some features. Small roundish flat brownish plants should be checked
- Rootless small *Lemnas* vs. *Wolflia* – do the touch test….little gritty peas = *Wolflia*.
- Some small plants are not nameable – take them to grow on, or forget them. No record is better than an inaccurate record.
- Be aware of other alien species which may become naturalised (see handout)