Human benefits of invasive species management

Nicola Morris
CINNG Project Coordinator
Chair Cornwall & South West Invasive Species Forums
To promote for the benefit of the public, the conservation protection and improvement of the natural environment by raising awareness and taking action on invasive alien species.

Bringing people and the environment together to improve the health and wellbeing of both.
Zebra Mussels (*Dreissena polymorpha*) in Bude Canal; a report on current distribution and potential for their control

Nicola Morris, Peter McGregor, Roz Evans & Hannah Hughes
CINNG* Charity no. 1161172
November 2018

*Community Invasive Non-Native Group
www.cinng.org.uk
Marine pathways

- 3rd yr BSc students
- Current and future marine INNS
  - Modelling techniques
- Legislation
  - shipping, commercial & leisure vessels, ballast water & biofouling
- Location of ports & harbours
  - Shipping routes - leisure, commercial

- Layered ArcGIS map
Himalayan knotweed

**Species Description**

**Scientific name:** Persicaria wallichii

**AKA:** Cultivated knotweed

**Native to:** China, India, Afghanistan, Nepal and Pakistan

**Habitat:** Abundant throughout both dry and moist areas including rocky outcrops, meadows, riparian woodlands and marshes.

Himalayan knotweed is a lesser known relative of the notorious Japanese knotweed (Fallopia japonica) yet is forecast to cause many of the same economic, environmental and social problems once it becomes better established. Popularised as an attractive ornamental, this species was first recorded in the UK countryside in 1917, yet has since spread from the confines of the garden via underground rhizomes (subterranean rosette structures) and the illegal dumping of green waste throughout the British countryside.

Similar in appearance to its Japanese counterpart P. wallichii is comparatively shorter, growing to a height of approximately 1.8m. Furthermore, in contrast to Japanese knotweed which possesses distinctly triangularly shaped leaves, the leaves of Himalayan knotweed are much longer, growing to 20cm in length and finish in a distinct point. Its current range is largely restricted to Scotland, Wales and the England-Wales border region.

Commonly found along road verges, stream sides and grasslands, plants are capable of growing rapidly from root fragments which rapidly develop into dense mats. This plant has no natural predators in the UK and its spread is of significant concern to areas inhabited by numerous threatened species of flora and fauna alike.

**Key ID Features**

- Creamy white or pale yellow flowers growing in clusters
- Definite triangular petiole
- Elongated leaves ending in a definite point
- Leaves grow to 20cm long

**Identification throughout the Year**

Similar to Japanese knotweed, P. wallichii overwinters as rhizomes and is unidentifiable until the spring. During the growing period, identification is based on the distinctive red petiole, the lanceolate leaves and the clusters of small creamy-white/pinkish flowers. During autumn, leaves will begin to wilt as displayed by a pronounced yellow colouration until winter, where the plant will appear dead, existing as pale hollow stalks.

**Similar Species**

- Broad-leaved dock (Rumex obtusifolius) [Native]
- Japanese knotweed (Fallopia japonica) [Invasive Non-native]

**Distribution**

Largely restricted to Wales and the West and East coasts of Scotland, further populations are now beginning to be recorded in Eastern England and Suffolk.

**References and Further Reading:**


Photos from: GIBNNS, Michael Collings and Adam Collings (unless otherwise stated).
Research

• Tolmiea menziesii – pick-a-back plant
  • Spread & colonisation
  • Habitat restoration

• Alpine newt
  • Terrestrial habitat
  • Predator behaviour & prey preference

• Zebra mussel
  • Control
  • Biosecurity
Social prescribing

- ‘Enabling healthcare professionals to refer patients to a link worker, to co-design a nonclinical social prescription to improve their health and wellbeing.’ (Social Prescribing Network)

- Environmental volunteering delivers increased social inclusion as well as health benefits, described in “Five ways to wellbeing” (NEF, 2008) as: connect, be active, take notice, keep learning, give.

- A valuable & effective treatment for many people with physical & mental health conditions currently treated solely with medication
Beneficiaries of social prescribing

• Individuals who could benefit from social prescribing in an environmental setting;

• GPs and health professionals wishing to use social prescribing in an environmental setting;

• Environmental organizations throughout Cornwall gaining hosting expertise for social prescription volunteers.

www.cinng.org.uk Facebook Twitter
South West Lakes Trust

- Invasive Species Officer
  - Raising the awareness of the management of invasive non-native species
  - Promoting importance of biosecurity
- Charitable objective – to protect landscapes, biodiversity and habitats
- Project hosted by SWLT sponsored by South West Water
South West Lakes Trust

• Education and awareness
• Creation of resources for user groups

• Working with local communities, volunteers, employees, partners and external funders
• Improving the understanding of the risks presented by invasive non-native species
• Actively engage with user groups to make biosecurity control measures part of their everyday experience