



NATIONAL PARKS WALES  
Britain's breathing spaces

## Invasive Alien Species Briefing Paper to the Environment and Sustainability Committee, National Assembly for Wales

The list of invasive alien species in Wales both on land and water is very long and potentially worrisome. We don't actually know what impacts such invasive species will have on our protected landscapes because we have yet to establish the extent of the problem now and going forward into the future.

American mink, grey squirrel, American signal crayfish, Zebra mussel, killer shrimp, velvet mitten crab, Australian swamp stonecrop, Rhododendron, Cotoneaster, Japanese knotweed, Himalayan balsam and giant hogweed are currently the known invasives that are recognised as significant invaders, within and beyond Wales' National Parks.

### 1. The adequacy of the data and information currently available on the extent and impacts of invasive alien species in Wales.

We note that up-to-date, accurate data is difficult to collate due to the size of areas in question, rapid changing distribution and lack of manpower. Data, where it is collated may not be in an agreed format, and no-one, other than a select few individuals are actively looking for the presence of invasives. Snowdonia National Park Authority is fortunate in having base studies for Rhododendron Ponticum undertaken and they have been subsequently developed/built upon, which has involved a multi-agency approach.

## papur briffo briefing paper



Parciau Cenedlaethol Bannau Brycheiniog, Arfordir Penfro ac Eryri yn gweithio mewn partneriaeth  
Brecon Beacons, Pembrokeshire Coast, and Snowdonia National Parks. Working in Partnership.

Parciau Cenedlaethol Cymru  
National Parks Wales

126 Stryd Bute / 126 Bute Street  
Caerdydd / Cardiff, CF10 5LE

Ffôn / Tel 029 2049 9966  
Ffacs / Fax 029 2049 9580

Ebost / Email [nationalparkswales@anpa.gov.uk](mailto:nationalparkswales@anpa.gov.uk)

Initiating a new data collation would be costly, especially in the current economic climate. This could be better managed and savings found through a framework whereby areas could be mapped for invasives, during the day to day operations of multi-agency staff.

Up to date data is fairly easy to maintain, providing that all parties are using the same methodologies/time frames and are willing to collaborate and share data. We believe that accurate data is key to establishing and underpinning programs and projects for eradication.

Adequate data is important. For example - Snowdonia National Park Authority & Rhododendron. The National Park Authority (NPA) has an *invasive* GIS layer (apart from rhododendron) which is based upon data supplied by local record centres, but it is incomplete and is becoming less accurate, and *less adequate* due to age of the original data collection.

Natural Resources Wales (NRW) have data for riparian zones, woodland sites and designated sites which could be valuable data sets to expand knowledge on invasives from and aid in establishing the broader picture.

Our changing climate may play a role in the spread of invasive species, but at present the evidence is unclear. The number of alien species in Europe has increased 76% in the last 30 years<sup>1</sup>, while climate change may be a significant factor other factors, for example increased global trade or the intensification of certain pastoral systems may provide opportunities for certain invasive species to establish themselves and spread. Further research is required.

**Impacts:** Each National Park Authority employ staff who provide their opinion on the detrimental effect of invasive species. However, there is little economic data regarding the local or regional impacts of infestation. On a Europe-wide scale, the costs are immense and constant. A 2008 study<sup>2</sup> on the impacts of invasive species to the EU came up with a figure of €12.5 Billion per year, based upon the cost of eradication/control; damage to infrastructure, agriculture and forestry; and prevention, research and monitoring.

## **2. Action taken to date by the Welsh Government and relevant authorities to tackle this issue.**

Data issue; National Park Authorities use volunteers and observations made by staff (Ecologists, Wardens etc) but the data collected in some situations is disjointed and ad-hoc. Depending upon the aggressive nature of the species data can become out-of-date quickly, in some instances within a year or two.

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<sup>1</sup> SCIENCE, May 2010, [www.sciencemag.org](http://www.sciencemag.org)

<sup>2</sup> Kettunen, Genovesi, Gollasch, Pagad, Starfinger, ten Brink & Shine. 2008. Assessment of the impacts of IAS in Europe and the EU (Final module report for the European Commission). IEEP

Within Snowdonia National Park a strategic cross-Agency approach<sup>3</sup> has been adopted to tackle invasive Rhododendron, with some success. Significant inroads are being made into one of the most notorious hotspots in the Nant Gwynant valley. The current partnership value has been £704k over 5 yrs, though an additional £225k failed to materialise due to funding delays. In spite of the limited success we have had in Snowdonia against one invasive species we believe that the case can be made for a lead Agency being given the responsibility - and funded - to tackle invasive species and adopting a more co-ordinated approach. Costs are offset against the economic costs to biodiversity/agriculture & forestry, to name three that result from invasive species. The experience of SNPA in tackling Rhododendron has informed the development of a method for controlling invasive species elsewhere, it has - in effect - acted as a pilot.

A co-ordinated lead agency approach would, we believe, be a more efficient use of resources, avoid duplication; gather and disseminate specialist knowledge, techniques and advice. The lead Agency would be in a position to commission and fund research; and be held accountable, by the public and policy-makers for delivery.

Mirroring the approach adopted in Snowdonia, a pan-Pembrokeshire INNS (Invasive Non Native Species) group has been instigated under the auspices of the Pembrokeshire Biodiversity Partnership. The group, comprising a wide range of stakeholders and interest groups has a coordinating and research remit for both terrestrial and (arguably more critically) marine environments. This co-ordinated approach is complemented by existing and proposed work on the ground that will be better prioritised and coordinated as the work of the group develops. Existing effort includes Rhododendron and Himalayan Balsam control by the Pembrokeshire Coast National Park Authority together with a long term commitment to this aspect of land management.

Focusing, as SNPA has done, on the Rhododendron problem has meant that other invasive issues have had to be "parked" until capacity and resources can be redirected. For instance SNPA would like to focus on Knotweed, believing that the Knotweed weevil is cost effective means of treating the problem. It is unfortunate that protected areas are not afforded some kind of priority when it comes to the prioritisation of control programmes since doing so may allow NPAs to take a concerted pan-species approach.

### **3. How action to tackle invasive alien species in Wales could be improved;**

The shared common goal of sharing invasive species intelligence between Agencies would be a positive, non-resource intensive start moving everyone away from the accepted status quo. In addition to this there are a number of approaches that are worthy of adoption.

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<sup>3</sup>Rhododendron in Snowdonia and a strategy for its control

[http://www.eryri-npa.gov.uk/\\_\\_data/assets/pdf\\_file/0020/68600/Rhododendron-Strategy-Final.pdf](http://www.eryri-npa.gov.uk/__data/assets/pdf_file/0020/68600/Rhododendron-Strategy-Final.pdf)

Rhododendron yn Eryri a strategaeth i'w reoli

[http://www.eryri-npa.gov.uk/\\_\\_data/assets/pdf\\_file/0003/68601/Strategaeth-Rhododendron-Terfynol.pdf](http://www.eryri-npa.gov.uk/__data/assets/pdf_file/0003/68601/Strategaeth-Rhododendron-Terfynol.pdf)

A sense of urgency by all agencies including Welsh Government and DEFRA at an earlier stage of infestation would help. Action at an early stage may halt an invasive species in its tracks, as well as reduce the future economic burden associated with inaction. While an infestation is small, all “individuals” can be removed. However, leave an infestation until it has become widespread or dense the cost of removal is on average 40 times more expensive<sup>4</sup>.

Agencies need to come together at an early stage to agree the appropriate ecosystems approach management unit size for tackling invasives. A more integrated approach may lead to the invasive species problem being managed over an area, rather than a species by species basis. This would be particularly useful where several species are invading an area, and doing so will help to set control priorities and costs.

Action could be added to Glastir targeted elements. SNPA had to campaign long and hard to ensure that Rhododendron control was included in the Targeted element package, but it will be vital that WG share data on treated sites to ensure that GIS layers and data sets are maintained. While this approach provides much needed resources a co-ordinated approach would be required since there may be gaps in adoption (i.e. farms not in Glastir or invasive options not implemented), gaps that were they no addressed could reintroduce an invasive species to an area. It could be argued that invasive control if applicable should be mandatory in Glastir.

Action against invasive species could be incorporated where there are other problems. For example, the River Usk is infested with Himalayan balsam, *and* is troubled by excessive grazing pressure and poaching along the eroding river banks and river cliffs. The solution here is restoring the riparian strips and scrub. There is, however no perfect response, this solution has to be balanced against Welsh Government policy to improve access to water (the SPLASH fund) and human feet are one of the principal movement agents for Himalayan balsam seeds.

Natural Resources Wales may be the most effective national Agency to coordinate an action plan against invasive species. NRW are well placed to coordinate the collection, mapping and distribution of data on a scale beyond National Park boundaries and expertise. For the same reasons NRW are also well place to lead efforts to agree the ecosystem management unit size for different invasive species too. NRW could empower locally based partners to deliver against invasive species.

The private sector could be enlisted. Businesses often sit alongside the corridors that support invasive alien species, and corporate social/environmental

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<sup>4</sup> Harris, S.; Timmins, S.M. 2009: Estimating the benefit of early control of all newly naturalised plants. Science for Conservation 292. Department of Conservation, Wellington. 25 p.

responsibility policies may provide invasive species managers with leverage to negotiate, secure funding.

Finally, research into invasive species needs to be significantly increased if we are to adequately inform our approach and target our resources. Research should allow us to ascertain where the biggest gains will be made, for instance, via an integrated terrestrial or an integrated aquatic approach?

**4. The European Commission's proposals to bring forward a Directive that would require Member States to take coordinated action to address this issue.**

National Parks Wales welcomes the development, since it may force the hand of those who have failed to give the issue the priority and significance it deserves. The issue is not popular and attracts little or no funding. While it may be easy to support the directive in principle, delivery in practice will fall short unless adequate funds follow.

European funding cycles, usually over the short to medium term, need to better appreciate and reflect the funding needs of the long term (20+ years) invasive species strategy. Despite being a mechanism towards addressing the problem European funding bodies - that require multiple funding applications over the course of a strategy - may inadvertently raise the cost of dealing with an invasive species.