

# THE GLENS OF ANTRIM

ISSUE THIRTEEN SPRING 2017

THE NEWSLETTER FOR THE HEART OF THE GLENS LANDSCAPE PARTNERSHIP SCHEME

Heart of  
the Glens  
Landscape Partnership Scheme

## SPECIAL EDITION

### INVASIVE PLANT SPECIES IN THE GLENS

- WHY ARE THEY A PROBLEM?
- WHERE THEY ARE?
- WHAT CAN WE DO?

# WELCOME TO THIS SPECIAL ISSUE OF THE NEWSLETTER

Cushendall knotweed



## INTRODUCTION

Due to its valuable habitats and landscapes, and the challenges facing its agriculture and economy, The Glens of Antrim are particularly sensitive to the impact of invasive species. The Heart of the Glens Landscape Partnership Scheme undertook this study to assess the distribution of the main invasive plant species in the Glens and to look at how this issue might be tackled in the future.

## SURVEY METHOD

In Autumn 2016, a survey of the principal 'corridors' was carried out. The corridors included main roads, rivers and forests. It is well known that invasive plants spread most easily along these routes and this would give a good indication of what species were prevalent. Extra information was added to this from an adhoc survey which gathered information from members of the public, staff of CCGHT and other agencies to provide information on the whereabouts of invasive plants in the region.

## WHAT ARE INVASIVE SPECIES

Invasive Alien Species are defined by Invasive Species Ireland (a joint venture between the NI Environment Agency and the National Parks and Wildlife Service) as:

"...species that have been introduced (deliberately or accidentally) by humans and have a negative impact on the economy, wildlife or habitats."

Invasive Alien Species can be plants or animals, and can cause a wide range of problems, including:

- DAMAGING NATURAL HABITATS AND LANDSCAPES
- AFFECTING WATERWAYS LEADING TO FLOODING AND SEDIMENTATION
- REDUCING THE PRODUCTIVITY OF AGRICULTURE AND FORESTRY
- DAMAGING BUILDINGS AND ROADS, AND AFFECTING THE SALEABILITY OF PROPERTY

Building Damage from Japanese Knotweed










## COST OF INVASIVES

In 2013, the estimated annual cost of invasive species to the economies of the whole of Ireland was £207m. A report in 2010 estimated that it cost the economy of the UK £1.7 billion annually. These figures are likely to have risen since then and do not necessarily account for all the indirect costs. It seems crazy therefore to continue to allow the sale of some of these species we spend so much money and time trying to eradicate!

## FULL REPORT

The full report is available to download online at:  
<http://www.heartoftheglens.org/cms/wp-content/uploads/2014/07/Invasive-Species-Survey-of-The-Glens-Report-2.pdf>

# INVASIVE PLANT SPECIES SURVEYED

SPECIES	MEANS OF SPREAD	MAIN RISKS	CONTROL
 <p><b>JAPANESE KNOTWEED*</b>  <i>Fallopia japonica</i>            Introduced as garden plant, 19th C, from Japan</p>	<p>Plant is sterile in Britain and Ireland and only spreads through root and stem material, accidentally or deliberately moved by human action or washed along rivers</p> <p>As little as 0.6g of root or stem required to regenerate</p>	<p>Seriously damages houses, buildings, hard surfaces and infrastructure growing through concrete, tarmac and other hard surfaces, usually where weaknesses already exist</p> <p>Forms dense thickets, shading out natural vegetation</p>	<p>Treatment by herbicide, though application by watercourses requires additional licence</p> <p>Treatment required for several years but costs fall sharply as amount of foliage to be treated reduces</p> <p>Deep excavation and burial possible but needs to be very deep to prevent regrowth</p>
 <p><b>GIANT HOGWEED*</b>  <i>Heracleum mantegazzianum</i>            Introduced as garden plant, 19th C, from Causasus</p>	<p>Biennial or perennial, primarily spread by seeds which are readily spread along watercourses</p>	<p>Contact with skin causes burns which react to UV light</p> <p>Can form dense stands, shading out native vegetation.</p> <p>When plant dies back in winter, exposed soil is vulnerable to erosion</p>	<p>Shallow digging effective for small patches</p> <p>Treatment by herbicide, though application by watercourses requires additional licence</p>
 <p><b>HIMALAYAN BALSAM*</b>  <i>Impatiens glandulifera</i>            Introduced as garden plant, 1830s</p>	<p>An annual, Himalayan Balsam has seed pods that explode when touched, throwing seeds up to 6m</p> <p>Seeds are readily spread along watercourses</p> <p>Sometimes deliberately sown by beekeepers as a nectar source</p>	<p>Can form dense stands, shading out native vegetation.</p> <p>When Balsam dies back in winter, exposed soil is vulnerable to erosion</p>	<p>Plant can be uprooted before seed sets, or cut to ground level</p> <p>Treatment by herbicide, though application by watercourses requires additional licence</p>
 <p><b>PHEASANT BERRY</b>  <i>Leycesteria formosa</i>            Introduced as garden plant from Himalayas</p>	<p>Deciduous shrub, seeds dispersed by water and by birds and mammals</p> <p>Still widely sold in garden centres/nurseries and popular as game cover</p>	<p>Forms thick impenetrable thickets that shade out natural vegetation</p>	<p>Individual plants can be dug out</p> <p>Impacts can be managed through frequent cutting but herbicide treatment required to eradicate, with repeated applications often necessary</p>
 <p><b>CHERRY LAUREL*</b>  <i>Prunus laurocerasus</i>            Introduced as garden plant from Black Sea area</p>	<p>Some spread by berries being eaten by birds but most spread is by layering and suckering</p> <p>Still widely sold in garden centres/nurseries and used in landscaping schemes</p>	<p>Forms thick impenetrable thickets that casts year-round shade, suppressing natural vegetation</p>	<p>Excessive growth can be tackled by cutting back, but herbicide treatment required to eradicate</p>
 <p><b>RHODODENDRON*</b>  <i>Rhododendron ponticum</i>            Introduced as garden plant in 17th</p>	<p>Produces large quantities of viable seed (3000-7000 per flower head)</p> <p>Readily layers where branches touch the ground</p> <p>Still widely sold in garden centres/nurseries and used for game cover and in forestry landscaping</p>	<p>Forms thick impenetrable stands that casts year-round shade, suppressing natural vegetation, exacerbated by very acidic nature of leaf litter</p>	<p>Excessive growth can be tackled by cutting back, but herbicide treatment required to eradicate, with application over several years required to tackle seed bank in soil</p>
 <p><b>SEA BUCKTHORN</b>  <i>Hippophae rhamnoides</i>            Native of Eastern GB, introduced to Ireland late 19th C</p>	<p>Some spread by birds eating the berries but most Sea Buckthorn spreads from plants deliberately planted c100 years ago to stabilise dunes</p> <p>Still sold in garden centres/nurseries, less often used in landscaping than 10-20 years ago</p>	<p>Forms extensive stands which shade out natural vegetation, particularly of sensitive dune flora</p>	<p>Physical cutting and digging usually employed, followed by herbicide treatment of stumps</p>

\*Species is listed as being a 'High Risk Species' across the island of Ireland - Risk analysis and prioritisation: For invasive and non-native species in Ireland and Northern Ireland (2013)

# SUMMARY OF THE MAIN RESULTS

Of the survey species, **Japanese Knotweed**, **Himalayan Balsam** and **Rhododendron** are the most widespread and dominant species in the Glens. **Pheasant Berry** and **Cherry Laurel** are also widespread and in some locations, are reaching significant densities. **Sea Buckthorn** is very local in its distribution. No **Giant Hogweed** was found in the survey. Other significant alien species found include **Himalayan Knotweed**, **Crocospia** and **Pirri-pirri Burr**.

**Road Sides** are generally clear of invasives, but there are localised problems with Japanese Knotweed (and sometimes the similar but less invasive Himalayan Knotweed) usually associated with old tip sites, dumping in laybys or old houses, especially on the **A2 (Antrim Coast Road)**, **A43 (Glenariff)** and **Glen Road (Glenariff)**. These are generally towards the bottom of valleys so at lower risk of spread, but Japanese Knotweed near the **A43/Ballyemon Rd** junction is at the top of the Glenariff catchment and at risk of downstream spread. Himalayan Balsam is locally abundant along **Glendun Rd** and its junction with the A2.



Himalayan Balsam

**Rivers** are iconic features of the Glens, each with its own character and landscape. **Glenshesk**, **Carey** and **Tow** rivers all have significant problems of Japanese Knotweed that will be affecting habitats, agriculture and property. **Glendun** has localised problems with Japanese Knotweed, and has an extensive infestation of Himalayan Balsam; **Crocospia** is locally dominant on the river banks. **Glenaan** river is generally clear but has major stands of Japanese Knotweed at the Gaults Rd junction. **Ballyemon** river has Japanese Knotweed



Japanese Knotweed on Riverbank

from Cushendall to the Gaults Rd junction, but is clear upstream of there. **Glenariff** has a significant Japanese Knotweed problem in Waterfoot but is generally clear upstream, though **Crocospia** is abundant on the river banks, and **Rhododendron** is abundant in the ravine section of Glenariff Forest Park. **Carnlough**, **Glencloy** and **Glenarm** rivers are generally clear though all have some Japanese Knotweed in their lower stretches.



Rhododendron Ponticum can seriously invade

**Forests** are another important part of the landscape of the Glens. Invasives are most often found in forest edges or higher-profile, more 'landscaped' parts, especially in **Ballypatrick** and **Glenariff Forests**, with **Rhododendron** and **Cherry Laurel** the main species. **Glenariff** also has an area with Japanese Knotweed, **Pheasant Berry** and **Bamboo** south-west of the Visitor Centre – because of the steep slopes and its location at the top of the catchment this is an area of concern. **Breen** has abundant **Pirri-pirri Burr** along the forest tracks, and this species was also seen in single locations in **Ballycastle Forest** and **Slievenorra**. **Cottage Wood** has abundant **Rhododendron**, **Cherry Laurel** and **Pheasant Berry** and the **Layd Coastal Path** has some areas of **Himalayan Knotweed**. **Glenarm Forest** has significant levels of **Pheasant Berry**.

## “Did you Know?”

1. SINCE THE 17TH CENTURY INVASIVE SPECIES HAVE CONTRIBUTED TO NEARLY 40% OF ALL ANIMAL EXTINCTIONS FOR WHICH THE CAUSE IS KNOWN.
2. JAPANESE KNOTWEED CAN GROW TO 3-4M IN JUST 10 WEEKS – THE EQUIVALENT OF TWO GROWN ADULTS. UNDERGROUND, ITS ROOTS – OR RHIZOMES – CAN SPREAD 7M HORIZONTALLY AND COMPROMISE THE STRUCTURE OF BUILDINGS. IT CAN MAKE PROPERTY UNSALEABLE.

# TACKLING THE PROBLEM – WHAT CAN WE ALL DO?

Now that we have a better understanding of the extent of the problem how do we all go about tackling it? Here are just some recommendations:

## GENERAL PUBLIC, FARMERS & LANDOWNERS

### HOW CAN INVASIVE PLANTS AFFECT ME?

- They can damage buildings, driveways and other structures.
- Negatively impact property prices and saleability, and your ability to secure a mortgage.
- Cause serious damage to your local woodlands, rivers and other wildlife habitats.
- **Farmers:** They can negatively affect agricultural and forestry productivity of land and reduce the land available for subsidies. Erosion linked to invasive species can lead to loss of useful riparian (riverside) land.

### WHAT CAN I DO?

1. Learn how to identify the main invasive species and how to tackle them safely. Report any sightings in the countryside to: <http://www2.habitas.org.uk/records/ISI>
2. Avoid buying or planting them, choose native or non-invasive species instead
3. Get involved with local groups to tackle some of the recommended sites (see Page 7).



Knotweed

## COMMUNITY AND INTEREST GROUPS

(National Trust, Ulster Wildlife, etc.)

### HOW DOES IT AFFECT US?

Invasives can affect the character, attractiveness and economy of localities. They can also affect management of your landholdings or the landscapes, habitats and species that you wish to protect.

### WHAT CAN WE DO?

1. Act as focus for campaigns to raise awareness amongst your members and with the general public.
2. Lead by example by removing existing invasives on your lands and by explicitly choosing to purchase only native or non-invasive species from plant suppliers.
3. Use members and volunteers to lead events to tackle some of the recommended sites below. These should form part of an overall plan to tackle invasives in the catchment area or corridor.
4. It may even be possible to set up a new community group or specific project to tackle invasives, as has happened in many places elsewhere (<http://www.nonnativespecies.org/index.cfm?pageid=382>).
5. **Beekeeping groups** can raise awareness as to the damage Himalayan Balsam can cause to native habitats and the importance of native plants and non-invasive plants for nectar and pollen.
6. Campaign for stricter controls of the sales of invasive species and implementation of control measures.

## BUSINESSES

1. **Estate Agents / Surveyors:** Be vigilant, particularly for Japanese Knotweed, which can impact on acquiring a mortgage.
2. **Landscape Designers / Contractors / Architects:** Avoid specifying or using invasive species, use native or non-invasive alternatives instead.
3. **Garden Centres / Plant Suppliers:** Encourage consumers to purchase alternative native and non-invasive species. For example, instead of laurel hedging encourage consumers to consider Griselinia, privet or beech.
4. **Topsoil & Aggregate Suppliers:** Make sure to carry out regular checks for invasives on quarries etc. and eradicate any signs of them if spotted. Ensure that all material is free of invasive species before distributing.
5. **Waste Companies:** Take all precautions possible to ensure that waste being dropped off is free of invasive species. Be vigilant and monitor your grounds regularly for any new stands of invasives.
6. Businesses could be encouraged to contribute to a common control fund, on the basis that in the long term it is protecting assets.

# GOVERNMENT

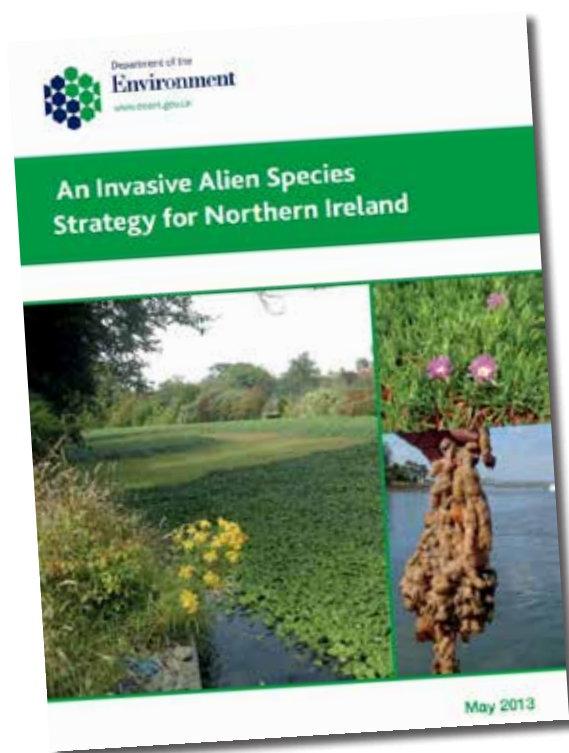
## GOVERNMENT BODIES / AGENCIES

### – COUNCILS, HOUSING EXECUTIVE, TRANSPORT NI & RIVERS AGENCY

How does it affect us? Control of invasives can be a significant drain on resources. The presence of invasives may also run counter to recreation, biodiversity and other remits or policies.

### WHAT CAN WE DO?

1. Raise general awareness through their interaction with the public and other organisations. Councils can use the Community Planning process and other high profile initiatives such as Britain In Bloom as ways of highlighting the issue to engage with different stakeholders.
2. Organise volunteer invasive bashing events on selected safe and manageable sites. These can be done in partnership with local community groups and / or national interest groups e.g. Ulster Wildlife or National Trust. These should form part of an overall plan to tackle invasives in the catchment area or corridor.
3. Train staff to recognise, report sightings and how to effectively tackle them.
4. Demonstrate best practice in management of invasives. Avoid buying or planting invasives (e.g. laurel), choose native or non-invasive species instead.
5. DAERA can follow through on the aims and objectives set out in 'An Invasive Alien Species Strategy for Northern Ireland' (2013) such as legislating for the ban on sales of 'High Risk Species'.



## FOREST SERVICE

### HOW DOES IT AFFECT US?

- They can affect forestry productivity through competition for light and nutrients.
- Affect the extraction and transport of timber if Japanese Knotweed is present.
- Can be agents of forestry diseases e.g. Rhododendron is a known host of Phytophthora ramorum.
- Impacts two of the Forest Services' three Strategic Aims 'Profitable and sustainable forestry and land management and increased forest cover' and 'Healthier people, plants and environments, reduced threat from new and emerging plant diseases, and rapid control of plant pest and disease outbreak'.
- Impacts negatively on biodiversity and amenity value of woodlands.

### WHAT CAN WE DO?

1. Train staff to recognise and take the necessary control measures for different invasives.
2. Demonstrate best practice in management of invasives, and in using non-invasive and native species in landscaping of public areas and forestry edge schemes (particularly by controlling and not planting Rhododendron and Cherry Laurel). The upland location of most forestry offers opportunities to demonstrate the importance of whole-catchment approaches to managing invasives.

## POLITICIANS

### HOW DOES IT AFFECT US?

- Invasives have serious negative impacts on local communities, individuals, the local and national economy, and the environment.
- Government through its various departments, agencies and councils spends tens of millions on invasive removal every year, yet ironically there is **limited legislation** stopping the sale and planting of many invasive species.

### WHAT CAN WE DO?

1. Legislate for a ban on the sale and use of known invasive plants particularly those listed as 'High Risk Species'. This was one of the key objectives set out in 'An Invasive Alien Species Strategy for Northern Ireland' (2013).
2. Ensure that government agencies have adequate resources and the will to tackle the problem.

# PRACTICAL STEPS WE CAN TAKE STRAIGHT AWAY IN THE GLENS

## POTENTIAL VOLUNTEER INVASIVE BASHING EVENTS



There are several locations where volunteer events, with the support of skilled conservation groups, Councils, Forest Service or other organisations, can safely make a real and lasting impact on the problem. Great sites for potential volunteer events include **(remember it is essential that any event is carried out with full consent of the landowner(s) involved and that all health and safety measures are taken):**

- *Himalayan Balsam Control (hand pulling):* Tow River, Carey River, Glendun River (there is a significant problem on this river and road that would take a concerted effort over a few years), Glencloy River
- *Rhododendron:* Ballypatrick Forest with Forest Service
- *Cherry Laurel:* Glenmona House and Caravan Park with the National Trust and Council
- *Pheasant Berry:* Glenarm with the Glenarm Estate

## BUYING AND PLANTING INVASIVES



The main source of spread of invasive species across all of Ireland is through the horticultural industry. If everybody stopped buying these plants we could make a major difference. There are lots of alternatives that are every bit as attractive, don't cause any problems and they're great for our wildlife! There are also non-native but non-invasive plants that do the same job but don't cause the same problems:

### *Suitable Hedging:*

- Native: Whitethorn, blackthorn, native privet, yew & holly
- Non-native evergreen: Griselinia, privet & escallonia
- Non-native semi-deciduous: Beech, hornbeam & fuschia

## EASY GAINS FOR OUR MAJOR LANDOWNERS

There are several easy wins that major landowners in the Glens such as Councils, Forest Service, National Trust, others could make to demonstrate best practice in tackling this problem. These should be done strategically as part of an overall plan for the area and could involve a mix of contractor and volunteer works. Below are just some of these potential easy wins:

- *Forest Service:* tackling Rhododendron in Ballypatrick Forest.
- *Causeway Coast & Glens Borough Council:* tackle the problem with Rhododendron and laurel in Cottage Wood, Cushendall.
- *Causeway Coast & Glens Borough Council & National Trust:* removal of Laurel in Glenmona House and the Caravan Park in Cushendun.
- *National Trust:* tackle the Japanese Knotweed at the back of Cushendun GAA club and at Coolanlough Car Park, Fairhead.
- *Glenarm Estate, Mid & East Antrim Borough Council and Ulster Wildlife:* begin to tackle the problem of Pheasant Berry encroaching on the Estate, Straidkilly Nature Reserve and Bachelor's Walk and continue the removal of Japanese Knotweed.
- *Mid & East Antrim Borough Council:* continue the work tackling Japanese Knotweed in Goirtin Quarry, Carnlough and start the removal of the Crocosmia and Pheasant Berry on the Hurry Lane.

# CONCLUSIONS

There are three main steps that need to be taken to tackle invasive species:

- **Understand the problem** – Notwithstanding the geographical limits of the survey, it does give an idea of the scale of the problem across the area.
- **Prevent spread and the establishment of new sites** – we need to ensure the problem does not get any worse before we can start trying to reduce it. This needs to happen at local and government level.
- **Tackle existing locations** – this will require a prioritised programme of eradication, starting with the locations that pose greatest risk to property, river function/ecology and land productivity, and the source locations that are acting as reservoirs for spread

No one organisation or agency has the responsibilities, resources or even rights to tackle the problem of invasive species across the whole of the Glens, and so, at present, it is clear that only a partnership approach has any prospect of making an impact. However, it is also clear that this issue will continue to increase across the country if the political will to deal with it is not equal to this growing problem.

There are many stakeholders in the Glens who are affected by or potentially affected by invasive species, and it is important to bear in mind that invasives do not respect land ownerships or demarcations of responsibility. Many examples can be found where reductions in control by an agency in one area have led to major problems elsewhere. Similarly, it is a waste of resources for an agency to spend money tackling invasives it is responsible for, if uncontrolled invasives on adjacent land or upstream on a river can re-colonise at any time or indeed if we keep allowing these same plants to be sold and planted in the countryside.

Controlling invasives can be very expensive, requiring time, specially-trained personnel and pesticides, and specialist contractors, who usually charge higher rates when working in more remote locations. But in the Glens, we have an enormous resource in the form of our farmers, who have the skills to control invasives and are close to the problem. Some invasives, particularly Rhododendron and Himalayan Balsam, are suitable for control by volunteer activity, and there have been significant successes elsewhere with community-led invasive control projects.

The Glens of Antrim project area does not have the levels of invasive species found in some other parts of the country but it is clear that several rivers, and some sections of forests and woodlands, have significant problems with invasives, with Japanese Knotweed, Himalayan Balsam and Rhododendron the main problem species.

Although many areas are struggling with the problem of invasive species, the Glens of Antrim – an Area of Outstanding Natural Beauty, is largely biogeographically contained lends itself to the eradication of many invasive plant. With good partnership and co-ordination this is certainly achievable at this stage.



Pheasant Berry or Himalayan Honeysuckle  
on the Hurry Path, Carnlough

## ABOUT THE HEART OF THE GLENS

The Heart of the Glens Landscape Partnership Scheme is made up of 21 exciting different projects over five years and covers a large area from Ballycastle to Glenarm. This Scheme is focused on and for the benefit of the communities and beautiful landscape of the Glens.

- TO CONSERVE AND ENHANCE THE BUILT, NATURAL AND CULTURAL HERITAGE
- TO ENGAGE AND INSPIRE COMMUNITIES
- TO IMPROVE ACCESS AND LEARNING IN THE AREA
- TO OFFER HERITAGE SKILLS AND TRAINING

**Heart of  
the Glens**   
Landscape Partnership Scheme

THE OLD BANK, 27 MAIN STREET, ARMoy, BALLYMONEY BT53 8SL  
WWW.HEARTOFTHEGLENS.ORG T. 028 2075 2100  
E. LAURA@LPS.CCGHT.ORG

