



Invasive Species Survey of The Glens of Antrim

SPECIFIC REPORT AND RECOMMENDATION FOR:
**CAUSEWAY COAST AND GLENS
BOROUGH COUNCIL (CCGBC)**

Summary Report for:
Environmental Services, Planning, Leisure and Development

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Introduction

During Autumn 2016 the Heart of The Glens Landscape Partnership Scheme (a project within Causeway Coast and Glens Heritage Trust) carried out a survey in the Glens of Antrim relating to some of the most commonly known invasive plant species. This work was presented to the community, CCGBC, Mid and East Antrim Borough Council, DEARA Forest Service, National Trust and a range of stakeholders in October 2017. As part of the discussion on the day, it was decided that the Heart of The Glens Landscape Partnership Scheme would provide a short report to each of the stakeholders on the salient issues and suggest practical ways that they may address them.

Context

Financial Implications

The estimated annual direct cost of invasive species to the economies of the island of Ireland is £207,553,528 (€261,517,445). Correcting the estimate for GB for inflation, the current estimate of the annual cost of invasive species to the UK economy is £1.8 billion (€2.3 billion). The current estimate of the annual combined UK and Ireland cost is £2 billion (€2.5 billion). (Kelly *et al.*, 2013)

Biological Implications

The World Conservation Union states that “Invasive alien species are the *second most significant threat to biodiversity, after habitat loss*. In their new ecosystems, invasive alien species become predators, competitors, parasites, hybridises and diseases of our native and domesticated plants and animals.”

Health Implications

Some invasive species can have health implications, Perhaps, the most obvious example is one example is Russian Hogweed (also known as Giant Hogweed. Russian Hogweed sap, contains photosensitisingfuranocoumarins. When this sap contacts human skin in conjunction with sunlight, it can cause phytophotodermatitis - a serious skin inflammation which can have a similar impacts as serious burns. Heat and moisture (sweat or dew) can worsen the reaction which can lead to severe skin damage

Symptoms can be:

1. Painful blisters that form within 24 to 48 hours and become dark and pigmented
2. Scars that last up to six years, though typically only last a few months
3. Long-term sensitivity to sunlight is common
4. Blindness may occur if the sap gets into the eye



Figure 1. Russian Hogweed damage to a child's hand (from The Express online July 16, 2015)

Survey

While there are now many hundreds of alien invasive species in our environment, this study focused on the main plant species which have serious implications for land management as well as negative, economic, health and biodiversity impacts in the wider landscape/community. These species are widely seen as the main invasive threats, but with the correct control regime they can be successfully removed. These species included: *Rhododendron ponticum*, Cherry Laurel, Japanese Knotweed, Russian (or Giant) Hogweed, Himalayan Balsam, Pheasant Berry (also known as Himalayan Honeysuckle) and Sea Buckthorn. However, when other invasive species were seen they were also recorded.

For photographs of the species go to <http://www.heartoftheglens.org/cms/wp-content/uploads/2017/06/Newsletter-Issue-13.pdf>

A survey was conducted along the major corridors through the Glens of Antrim. Major corridors, in this instance are defined as rivers and roads, which act as the main routes for the dispersal of these species. The second part involved surveys of key public locations such as large forests and estates. Part three of the survey allowed the community to record and submit details of the invasive species they observed.

Results and specific management suggestions for Causeway Coast and Glens Borough Council

The overall survey report, can be accessed at: <http://www.heartoftheglens.org/cms/wp-content/uploads/2017/06/Invasive-Species-Survey-of-The-Glens-Report-2.pdf>, This report is supplemented by an Invasives Newsletter which acts as a user friendly summary report: <http://www.heartoftheglens.org/cms/wp-content/uploads/2017/06/Newsletter-Issue-13.pdf>

The area surveyed, which falls under the authority of CCGBC runs from Ballycastle southwards through the Glens of Antrim to Garron Point. Of the survey species, Japanese Knotweed, Himalayan Balsam and Rhododendron are the most widespread and dominant species in the CCGBC region of 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 with a significant stand at Glenariff beach with a few plants found near Corrymeela, Ballycastle.

No Giant Hogweed was found in the survey. However, other significant alien species found include Himalayan Knotweed, Crocosmia 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/Ballyeamon 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.

Rivers Glenshesk, Carey and Tow all have significant problems of Japanese Knotweed that will be affecting habitats, agriculture and potentially property values. This includes significant stands on council property at Ballycastle playing fields.

Glendun has localised problems with Japanese Knotweed, and has an extensive infestation of Himalayan Balsam; Crocosmia is locally dominant on the river banks.

Gleannan river is generally clear but has major stands of Japanese Knotweed at the Gaults Rd junction. Ballyeamon river has Japanese Knotweed to the Gaults Rd junction, but is clear upstream.

Glenariff has a significant Japanese Knotweed problem in Waterfoot but is generally clear upstream, though Crocosmia is abundant on the river banks and Rhododendron is abundant in the ravine section of Glenariff Forest Park.

Forests 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. Ballypatrick also has Pheasantberry. 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.

Council owned/managed sites in The Glens in which invasive species were observed.

1. **Ballycastle playing fields/park** has significant growth of mainly knotweed along the Tow River.
2. **Cottage Wood** has abundant Rhododendron, Cherry Laurel and Pheasant Berry
3. **Layd Coastal Path** has some areas of Himalayan Knotweed.
4. **Cushendun Caravan Park** has significant amounts of Cherry Laurel, which have been recently planted by CCGBC as part of landscaping activities.
5. **Glenariff Beach Front** has Sea Buckthorn.
6. **Glenariff and Cushendall** river walks have areas of Japanese Knotweed and Himalayan Balsam.
7. **Creagagh Wood** Local Nature Reserve has small areas of Himalayan Balsam around its road boundaries.

Actions to clear invasive species

The main recommendation of the report is that invasive species such as Japanese Knotweed, Himalayan Balsam and Russian Hogweed are best managed in a catchment wide process. These species have spreading mechanisms that use linear features, especially rivers, but also roads and tracks. Rhododendron and Cherry Laurel have other strategies, that utilise different methods for dispersal. Therefore, it is an economic and biological imperative to understand how these species move through the landscape before beginning removal actions. If this is not accounted, it is possible and, in many cases very likely, that recolonisation of cleared sites will occur from adjacent or upstream sources, wasting resources.

1. PRIORITISE FOR MAXIMUM LONG-TERM BENEFIT

It is understood that CCGBC is embarking on a scheme to clear invasive plants from their lands (Rachel Bain, pers. com.). It would be worth considering a strategic approach in this work. Many of CCGBC properties are linked to corridors (rivers and roads) or are adjacent to other sites which have invasive plants. In this context it may not be strategically or cost effective to remove invasive plants from sites that could easily be recolonised.

As part of CCGBC remit from Community Planning, it may be more effective to look at species in relation to biogeographical catchments such as river catchments (but also road networks). This will allow for a more complete assessment of the problem in relation to species which cause most risk e.g.: Russian Hogweed - health risk, Japanese Knotweed – planning/economic development risk etc. This approach would allow council to create a matrix to prioritize their actions over short, medium and long term.

2. UNDERSTAND THE BIOLOGY OF THE SPECIES AND PLAN FOR A LONG-TERM PROCESS

Each invasive species has a specific lifecycle and habitat preferences. Understanding these and tailoring eradication programmes around these is the key to the success of any removal efforts. Removal of invasives from any one site is a commitment to a process which will, at the very least, last over several years. There are many examples of poorly planned eradication attempts, that have wasted many thousands of pounds and have failed due to poor planning and long-term commitment.

Training staff in identifying and, under that right conditions, removing invasive species is a key part of this activity.

3. DO NOT BE A SOURCE OF THE PROBLEM.

It may seem strange, but many invasive species, that cost millions of pounds to remove every year, are still legally sold, thus recolonizing the countryside. While the removal of these plants from sale is a legislative issue for government, local government bodies such as CCGBC can create its own 'best practice' code by not planting invasive species on their own property and removing existing stands. Without such practice CCGBC may be the source of the problem for neighbouring landowners. CCGBC are still actively planting invasive species. For example: Cherry Laurel hedging was planted recently at Cushendun Caravan Site while at the same time, The National Trust are trying to remove Cherry Laurel from Glenmona House grounds and woodland, which is directly adjacent to the campsite. CCGBC can resolve this by having a policy not to use invasive species.

4. PLANNING ADVICE AND CREATING NEW 'BEST PRACTICE' FOR CCGBC

Traditionally planners have instructed on planting schemes, especially in relation to new build properties. These schemes, which may include instructions to use 'native hedges and trees' or just 'trees and hedges', are often not implemented to the same detail as the rest of the grey infrastructure such as buildings, roads, drains, etc.

Planners at CCGHT Council have an opportunity to suggest best practice in this matter by also actively advising against the use of invasive species in planting schemes. This can form part of the planning papers which may advise developers why the use of specific species in their schemes could be detrimental to the environment.

5. WORKING IN PARTNERSHIP AND DEMONSTRATING BEST PRACTICE AND LEADERSHIP TO OTHER BODIES AND GOVERNMENT

By creating a best practice approach to invasives across silos within council, CCGBC can act as a source of best practice for others to follow. Other councils, government bodies, NGO's, large businesses and others will be more easily persuaded to follow if they have best practice examples to follow. This will highlight CCGBC as a leader in this area, draw positive attention to CCGBC, and more importantly create a realistic solution to this ongoing and growing issue.

In Summary

The Glens Invasive Species Survey provides a starting framework of high quality information for CCGBC to assess their long-term approach to invasive plant species. Clearly, a quality, community wide, yet focused and stepped plan is needed to eradicate these species. This in turn will work towards providing health, economic and biodiversity benefits. It is hoped that this summation report along with the other documents provided will be a useful reference in any future process as council moves forward on this issue.

References

1. The economic cost of invasive and non-native species in Ireland and Northern Ireland (2013) John Kelly, Dave Tosh, Kathy Dale and Anthony Jackson, The Northern Ireland Environment Agency and the National Parks and Wildlife Service As part of: Invasive Species Ireland
2. Health Hazards & Safety Instructions for Giant Hogweed, New York State Dept. Of Environmental Conservation (web site) 2017

Useful Website

A useful Website for information on invasives through the The Island of Ireland (Supported by Department of Environment, Agriculture and Rural Affairs NIEA and National Parks and Wildlife Service) <http://invasivespeciesireland.com/>