

1. Current Status

1.1 Description

Wild cotoneaster (*Cotoneaster cambricus*) is also known as the Great Orme Berry or Creigafal (rock apple). It is a long-lived deciduous shrub that can spread to two metres wide when in cultivation but rarely achieves this dimension in the wild. It has attractive grey-green oval leaves that are woolly beneath and measure 15-40mm. Pink-white flowers around 3mm in diameter appear from April to June in clusters of 2-4. The berries are small (5-8mm across) and bright orange-red in colour, resembling a miniature apple. The Great Orme is the only known locality for this plant in the UK where it grows on isolated and exposed cliff ledges. Natural regeneration, either vegetatively or from seed, does not seem to occur, although conditions appear favourable. There is some disputed evidence to suggest that it may be *Cotoneaster intergerrimus*, which may have been introduced to the UK, thus this sole surviving population may not be native. The majority of the Wild Cotoneaster Steering Group considers that there is no strong evidence to consider this species to be a recent introduction, despite what has been recently published. Resolution of its taxonomic status is crucial to developing an appropriate conservation perspective for this species.



Adrian Lloyd Jones

English Name:
Wild Cotoneaster

Welsh Name:
Creigafal y Gogarth

Scientific Name:
Cotoneaster cambricus

1.2 Population and distribution

Wild cotoneaster is restricted to the Great Orme, Llandudno where only six of the original plants remain. When first recorded in the eighteenth century, it was described as being widely distributed at the locality but by 1978 it had declined to six individuals. This population has since been supplemented by the introduction of new plants grown in cultivation. The current population (2003) now stands at 17 plants. Natural recruitment to the site has not been recorded, but one seedling plant was found in 1993 in an area where seeds had been previously sown.

1.3 Legal status

- Wildlife and Countryside Act 1981 (Schedule 8).

1.4 Priority status

- UKBAP Priority Species
- Species of Principal Importance in Wales
- Local Priority Species
- IUCN RDB species - *Endangered*



2. Factors causing loss or decline

Historic and current factors causing the loss or decline of the species are listed below.

- Overgrazing by rabbits, sheep and feral goats hindering recruitment of new plants and restricting growth of established plants.
- Low seed productivity and germination
- The spread and occupation of favoured niches by invasive non-native cotoneasters and other exotic species
- Possible illegal collection
- Possible damage by climbers

3. Current action

- A UK Wild Cotoneaster Steering Group has been set up to co-ordinate action for the species.
- Most plants are within the Great Orme Country Park managed by Conwy County Borough Council Countryside Service. The site is designated as SSSI, LNR and is a candidate SAC. A monitoring programme is undertaken twice yearly.
- The locations of the plants are kept confidential, excepting the location of one of the plants which is widely known.
- Plants have been raised ex-situ and transplanted back on to the site with varying success. The monitoring programme assesses the number and condition of wild plants and transplants.
- Rock climbing is controlled by a voluntary agreement with the British Mountaineering Council to ban climbing from certain cliffs to protect cliff nesting birds during the breeding season, to ensure the safety of Marine Drive users and to provide protection to some of the wild cotoneaster plants.
- Wild cotoneaster plants exist in cultivation at Kew, Ness and Treborth Botanic Gardens.
- Genetic studies on the plant were conducted by Royal Botanic Gardens Kew and a report produced for the Countryside Council for Wales. The report showed that the original Cotoneaster plants on the Great Orme are closely related to each other, with a low genetic variability and are closely related to other members of *Cotoneaster integerrimus* sensu lato, but formed a distinct cluster.
- One of the original plants has been 'caged' to prevent grazing/browsing by rabbits, sheep and feral goats in order that the effects of this grazing on the plants can be assessed.
- Seed collected from some of the introduced plants has been sown (by volunteers and Great Orme Country Park) in the hope of producing more plants.
- Seed germination research is being undertaken using a Species Challenge Fund grant from CCW.

4. Objectives

1. **Maintain and enhance the population of wild cotoneaster by implementing site-based action including the recovery programme.**
2. **Use the importance of the species to raise the profile of biodiversity issues in Conwy.**
3. **Undertake all necessary research and monitoring.**



5. Links to other plans

Calcareous grassland HAP
Limestone pavement HAP
Maritime cliff and slope HAP
Scrubland HAP
CCBC Countryside Strategy

6. Sources of information

Principal author: Sally Pidcock (CCBC)
UK lead partner: Countryside Council for Wales
Local lead partner: Countryside Council for Wales

- UK Biodiversity Website: www.ukbap.org.uk
- Botanical Society of the British Isles
- Biodiversity: The UK Steering Group Report - Volume II: Action Plans HMSO (December 1995)
Tranche: 1 Volume: 2 Page: 179

7. Proposed Actions - Wild Cotoneaster			
7.1 Policy and Legislation	Objective	Partner	Target
7.1.1 Ensure that Wild Cotoneaster is fully protected by the planning system.	1	CCBC	Ongoing
7.1.2 Monitor the extent of criminal activity relating to the species encouraging compliance with legislation.	1, 3	NWP	From 2003
7.2 Species/Site Safeguard and Management			
7.2.1 Continue to control public access including climbing areas where this occurs, preferably through continued voluntary agreement.	1	CCBC	Ongoing
7.2.2 Promote appropriate habitat management, including the control of invasive vegetation, particularly non-native cotoneasters. On current, extant and likely sites, consider erecting exclosures on thin soils to assess grazing pressures.	1	CCBC	Ongoing.
7.2.3 Use existing and new exclosures to determine impacts, if any, of grazing.	1	CCBC, CCW	Ongoing
7.2.4 Determine origins of propagated stock. Continue propagation of plants and maintain stocks in cultivation, but cease translocations into the wild pending outcome of taxonomic and genetic studies. To reflect any genetic diversity in wild plants, it may be necessary to collect and propagate any further stock from additional parents. Origins of propagated material must be fully documented. Collection from wild plants will require a CCW licence.	1	CCW, WCSG	Ongoing (subject to availability of funding)
7.2.5 Deposit seed with national seed bank at Wakehurst Place, keep plants in cultivation and formalise existing work with University of Wales Botanic Garden, Treborth, University of Liverpool Botanic Garden.	1	BSBI, CCW, UoW, UoL, WCSG	Ongoing
7.2.6 Discourage illegal collecting of this species and pursue enforcement as necessary.	1	CCBC, NWP, CCW	Ongoing
7.3 Communication and Publicity			
7.3.1 Promote awareness of the ecological and protected status of the species with local environmental and natural history groups and other relevant organisations.	2	CCBC	Ongoing
7.3.2 Although the precise location of one of the plants is widely known, locations of all other plants should remain confidential. Ensure that local botanical groups and other relevant organisations are aware of the legal and ecological status of this species.	1, 2	CCBC, CCW, BSBI, WCSG	By 2004
7.3.3 Ensure UK Steering Group for Lowland Calcareous Grassland is kept informed of progress with research and plan implementation.	1, 3	CCBC, CCW, WCSG	Send report annually
7.4 Research and Monitoring			
7.4.1 Undertake autecological research to develop a better understanding of the species and its habitat requirements.	1, 3	CCW	Subject to funding
7.4.2 Establish the taxonomic status to ascertain whether the species is either the endemic <i>C. cambricus</i> or <i>C. integerrimus</i> .	3	CCW	Subject to funding
7.4.3 Establish a formal monitoring programme including the effects of grazing	1, 3	CCBC, CCW, BSBI, WCSG	Ongoing
7.4.5 Pass information gathered during survey, propagation and translocation and monitoring of this species to JNCC or Royal Botanic Garden, Kew so that it can be incorporated in national databases.	3	CCBC, CWW	Annually as data available
7.4.6 Provide information annually to the World Conservation Monitoring Centre on the UK status of this species and contribute to maintenance of an up-to-date global Red Data List.	3	CCW	Annually as data available
7.4.7 Review this action plan every five years	3	CCBC	2007