

## BULB LOG 25......18<sup>th</sup> June 2014

Work to rejuvenate the front garden continues as we cut back and prune the shrubs and trees that had over thirty-odd years closed over all the ground space. We are already seeing the benefits in the lower half that we cut back last year- there we have been enjoying a sequence of bulbs in flower since early spring. As you walk up the road and into the drive you cannot fail to notice the fantastic colour of Corydalis 'Craigton Blue' and then as you get closer you are aware of the lovely honey like scent that it also has. To get the best out of this plant you are best to lift and divide it every few years as after that it can get



congested with a drop off in flower power.



Corydalis 'Craigton Blue'



Among the plants we have been moving around it the front is a large clump of Celmisia that we raised from NZAGS seeds – I think it may be Celmisia semicordata.



We lifted it and split it into a number of plants and noticed that some stems had several flowers instead of the more normal single flower.



## Rosa sericea

One of the species roses we grow in the front garden is Rosa sericea which we raised from seed collected by Alastair McKelvie. It had grown up through the congestion of shrubs competing with Rhododendron, Acers and Sorbus but now it has more space we will prune it back to encourage regrowth lower down - we will wait until we have enjoyed this seasons flowers.





We did not cut all the Rhododendrons back as we know from experience that some will not bud on old wood. Rhododendron yakushimanum flowered prolifically this year and as the flowers go brown we 'dead head it' by nipping off the spent floral parts. It is an easy process and if you do it as the flowers fade the stem is brittle enough to just break away with



a bend and a twist. If you leave it too long that stem starts to toughen up and you will need to use secateurs.



Rhododendron yakushimanum

The reason we dead head is by removing the seed the plant immediately starts to put on new growth from the cluster of buds at the base of the flower stem – you need to take care not to remove these when pinching off the spent flower.



While working in the front I noticed a lot of these bugs, many in pairs, sunning themselves on one Rhodododendron.



They are some kind of Shield Bug but I would be grateful if any of you know exactly what they are. Shield Bugs are sap-sucking critters, so the main danger from them is virus transfer.



Other fauna we find around includes the froghopper nymph that covers itself in a protective layer of foam. These do suck the sap of the plants and while the foam may protect them from some predators it flags up their presence to this one.

There are many reasons why we are suffering a plague-like infestation of snails. Firstly the very mild winter allowed many more to survive and start breeding early also our cool moist climate is perfect allowing them to forage most of the day and night. We must also accept that by building rock gardens we are also creating ideal niches for them to hide away among the rocks.





Adults and juveniles are chomping their way through many of our plants and we go on regular snail hunts in an attempt to prevent their numbers growing much bigger.



I have a very tolerant attitude to the fauna of our garden and accept that we will never eradicate all those that we consider pests but there are limits to my tolerance. I am not bothered that we have mice in the garden and would be happy to live with them provided they do not eat my bulbs and for most of the time they do not. Every so often they do dig and eat the bulbs, especially Crocus, and that is when my tolerance stops. I do not know if it is when their numbers get high or that a generation develop a taste for Crocus corms but that is when I take some action.



Luckily nature will usually strike a balance and while I get annoyed at losing some mature bulbs to the mice, seeds provide a way for me to build them back up again – and so the cycle and my occasional battle with the mouse population will continue.

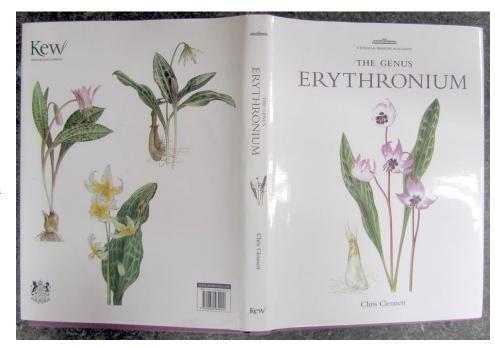


Dactylorhiza and Lilium are now coming into flower in the garden.

## **Book Review**

The Genus Erythronium by Chris Clennett (Kew Publishing 2014) ISBN 978 84246 492 2 Available for £ 52 via shop.kew.org/kewbooksonline

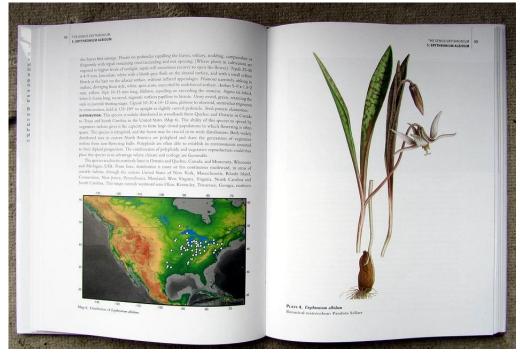
This is the first book to be published on Erythronium - it is part of the Kew series of Botanical Magazine Monographs following a similar style to their previous publications including 14 botanical paintings, some montaged on to the glossy dust cover, to illustrate some of the species.



THE GENUS ERYTHROHIUM V CONTENTS	VI THE GENUS ERYTHRONIUM CONTENTS
	6. TAXONOMIC TREATMENT
	Key to the species of Erythronium         35           Introduction         38
	Species concept
CONTENTS	Generic description   39
LIST OF PAINTINGS	Eurasa 51 Eastern North America 51 Western North America 71
PREFACE ix	Synonyms of taxa in other genera, or for which an accepted species has not been identified
1. HISTORY OF THE GENUS ERYTHRONIUM	has not been identified
Systematics and conservation	7. HYBRIDS AND CULTIVARS
Reproductive Biology         .5           Pollination Biology         .6           Population Dynamics         .6	Natural hybrids
Phylogenetic systematics and recognition of species and infraspecific taxa	8. CULTIVATION
Conclusions	Erythronium in the open garden
2. PHYTOGEOGRAPHY	Companion plants
	Propagation
3. MORPHOLOGY	
Habit	GLOSSARY AND ABBREVIATIONS
Stem and leaves	SELECTED BIBLIOGRAPHY AND REFERENCES
P. MarkenshimA	INDEXES:
Statiens (Androection). 17  Style and overy (Gynocciom). 18  Fruit and seed. 18	SCIENTIFIC NAMES
Fruit and seed Phylogenetic analysis of morphological data	COMMON NAMES
4. CYTOLOGY, ANATOMY, PALYNOLOGY AND PHYLOGENETIC STUDIES 23	ERYTHRONIUM CULTIVAR NAMES AND HYBRIDS
Cytology         23           Floral morphology and anatomy         24           Developmental biology         24	
Phylogenetic studies (molecular and combined)	
5. ECOLOGY AND CONSERVATION	
Introduction	
Ecology and population dynamics. 30 Breeding barriers, allopatry and sympatry 34 Conclusions 34	

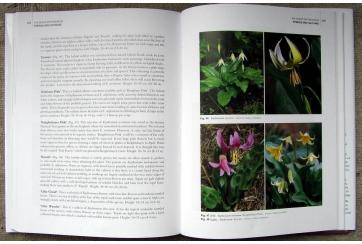
The contents page gives a good indication of the methodical way this book is laid out. The first chapter starts with the history of the genus from the historical discoveries, records and early attempts at classification - listing the major authors of the early studies of this genus - Watson, Baker and Applegate. The next paragraphs outlines some of the more recent scientific studies and researches into technicalities such as how the plants reproduce and have distributed themselves over their current geographical range a subject that is explained in more detail in the Chapter 2, Phytogeography.

Chapter 3, Morphology, looks at the physical characteristics of the genus showing how a family tree can be concluded from a detailed study of the bulb, leaves, flower etc. and Chapter 4 uses more scientific methods, such as DNA studies, many conducted by the Author, to create an alternative family tree. Ecology and conservation are the topics for Chapter 5 which looks in brief at the various habitat types and how those have influenced the current distribution of the different species.



The largest part of the book, Taxonomic Treatment, has the description, details, photographs and 14 botanical paintings to help illustrate all the 29 species currently recognised. A distribution map shows the recorded range of each species. This section starts with a Key to the species which looks extensive but it is the wrong time of the year for me to try out. I suspect that while it may work in the field or with true species the large number of hybrids that are in cultivation, often masquerading as species, this key will only act as a guide for garden raised plants.





Chapter 7 lists many of the known Hybrids and Cultivars. Around fifty are described with their origins/raiser where known to the author and, as he admits, this list cannot be exhaustive as new hybrids are appearing each year with many being named.

The final Chapter 8 covers the basics of cultivation, propagation, pests and diseases.

A Glossary and abbreviations list is included which I found to be most useful as I continually flicked back and forth while reading the scientific chapters to get the meaning of some of the words – not all were included. Although this book contains most of the information a gardener would want, a detailed list of published papers and references is included and will prove a very useful resource for anyone wanting to do further detailed reading.

I have been interested in this genus since the mid 1970's and grow many of the species and hybrids described in this book - as a result I have a detailed knowledge of them in cultivation. Over the years I have spent much time seeking out and reading all the publications and papers I could find to help me understand how Erythroniums have evolved and dispersed through the ages – the opening chapters of this book provides the reader with the salient points that it has taken me many years to find out. The chapter on Morphology describes the basic parts of the plants used to distinguish the species – with more detailed information being listed in the species descriptions later in the book.

I am slightly disappointed that this chapter is not more detailed and illustrated in some aspects; for instance the bulb which I think is a fascinating structure with a number of significant variants that could have been easily illustrated. Nowhere, for instance, could I find information on the chain-like remains of previous year's growth that remain attached at the base of the current bulb found on the Eurasian plants such as Erythronium dens- canis as well as some of the American species, such as Erythronium montanum. These structures are not redundant and if removed from the main bulb and split into individual chains each will form one or a number of new growths that can be grown on.

The botanical chapters, especially Chapter 4, are full of scientific terms and may seem a bit daunting to the average gardener but the two diagrammatic family trees, one based on Morphology and the other a Phylogenetic study, at

the end of each relevant chapter is very understandable and clearly shows the relationships within these plants. The list of species is in the classic form and is very useful with the detailed description of the plants along with distribution maps, habitat and cultivation notes for each species I suspect this will be the most useful part of the book for general gardeners wanting to identify their plants and learn more about them. All the botanical paintings are of the usual high quality we expect form the Kew Monographs and Curtis Botanical Magazine and add greatly to the visual appeal of this book. I would like to have seen more photographs used to illustrate not only full diagnostic features but also the charm and beauty that this genus has in abundance.

It is interesting to note that in some species under Cultivation it states 'the author is not aware of this species in cultivation' – in fact these plants are in cultivation as a quick search of the internet or specialist journals would show – as one example, we have grown E. klamathense and E. montanum successfully for many years.

I am sure that the author's reference under the cultivation section for E. pluriflorum to being 'unaware of the plant in cultivation outside the USA' along with a photograph by Polly Stone captioned 'Erythronium pluriflorum in cultivation at Fort Augustus, USA' is an error as it is pictured in the Stones' former garden in Fort Augustus, Scotland.

It is of great benefit into have a good listing of many of the known hybrids along with brief description as in many cases it will be these that will become most readily available to gardeners.

It is always difficult to write a complete guide to cultivating plants as every garden has different weather and ground conditions - the information provided in the Cultivation Chapter is a good general guide to start off with for many of the species and hybrids that are available - more detailed cultivation information for each species is included in the species listing pages. The design and layout of this book makes it both visually attractive and easy to find information quickly.

Yes I think it could have had more pictures that illustrate the fascinating bulbs, the seed, the flower details and so on though this may be something of a counsel of perfection but I also think The Genus Erythronium by Chris Clennett is an essential book to have as it provides a wealth of knowledge and information and if you have any interest in this wonderful genus you should acquire this book.

(Key Publishing 2014) ISBN 978 84246 492 2 Available for £ 52 via shop.kew.org/kewbooksonline



**Erythronium klamathense** 

Erythronium klamathense and E. montanum are among the species that Chris Clennett states he is unaware of in cultivation - both grow in our garden where they flower well every year. Provided the weather is kind at flowering time they also set seeds most years.



**Erythronium montanum** 



I also think that Erythronium sibericum is more in cultivation than the author is aware of. It grows very well in many of the northern gardens especially in the Baltic States and Scandinavia where it regularly seeds around. We also have a large number of flowering plants selected from successive generations of seed that grow and flower and seed well in our garden. Work for the future.....