



THE

FRITILLARIA

GROUP



The Fritillaria Group of the Alpine Garden Society
Journal 29 Autumn 2011



Editor: Pat Huff
Botanical advisor: Martyn Rix

The Fritillaria Group welcomes articles, short notes and photographs – especially of plants in the wild—line drawings, and other material concerning Fritillaria.

Copy dates: 1 May and 1 October

Articles are quicker and easier to handle if they are produced electronically, but typed and manuscript copy is also very welcome.

Photographs should be in the form of 35mm transparencies, or on photo CD. If possible, please send transparencies ahead of the copy to allow for scanning. Electronically produced images will only be accepted at a resolution of 300dpi.

The photographs of *Fritillaria aurea* on the front cover and *Fritillaria tortifolia* were both taken by Bob Charman this spring at Janis Ruksans' nursery in Latvia.

The Fritillaria Group Committee

Chairman: Bob Wallis
Secretary: Marcia Pain
Treasurer: Robert Charman
Membership: Marion Charman (co-opted)

Seed Manager: Mr Pat Craven
Publicity: Marcia Paine
Show Secretary: James Silver
Editor: Mrs Pat Huff
Webmaster: Paul Cumbleton
Members: Colin Everett, John Paine,

Pietro Roseo, Anne Silver

AUTUMN MEETING AND AGM

SUNDAY, 23 October 2011

to be held at

LOUGHBOROUGH COMMUNITY COLLEGE
Thorpe Hill, Loughborough LE11 4SQ

08.00 – 10.00 Setting up and coffee. Sales tables open.

10.00 – 11.00 Annual General Meeting

11.30 – 13.00 Presentation by Susan Band from
Pitcairn Alpines: “Growing Frits
Commercially in Scotland”

Lunch break

14.00– 15.30 Presentation by Jim Almond:
“Fritillarias from A – Z”

15.30 – 16.00 Raffle and close of meeting

All times are approximate

Refreshments available will be tea, coffee and biscuits only.
You may like to take your lunch at the following pubs in the
locality or alternatively, we suggest you bring your own
food for the day.

‘Maxwells’ on Maxwell Drive, Loughborough LE11 4RZ
‘The Warwick Arms’ on Warwick Way, Loughborough
LE11 4UG

CONTENTS

Autumn Meeting and AGM	1
From the Editor	2
Visit to Janis Ruksans Nursery	3
<i>By Bob and Marion Charman</i>	
Fritillaries on Chios and Samos Islands	7
<i>By Janis Ruksans</i>	
The Seed Exchange	15
<i>By Pat Craven</i>	
A selection of Plants at the Spring Show	16
<i>By Bob Charman</i>	
Growing North American Fritillaries in Tasmania	19
<i>By Leslie Crowden</i>	
The New Zealand Fritillaria Group	22
<i>By Leslie Cox</i>	

FROM THE EDITOR

This number of the Fritillaria Group Journal begins with a celebration of the life and career of Janis Ruksans, one of the most outstanding plantsmen of his generation. This spring, Bob and Marion Charman attended an early birthday cum anniversary party in Latvia and came back with words and images of the man and his amazing nursery. Janis himself has contributed a fascinating article on the fritillaries of the Greek islands of Chios and Samos to this journal. From islands at the other end of the World, we have a report from Leslie Crowden of how she grows North American fritillaries very successfully in Tasmania. Lesley Cox writes about the New Zealand Fritillaria Group. Formed as recently as 2003, the Group is made up of mad-keen enthusiasts whose longing to grow every single member of the genus is thwarted on all sides by the dreaded "Biosecurity Index/Plants". Pat Craven explains to members how to apply for seeds in this year's distribution, including those most generously offered to the Group by Jenny Archibald through the good offices of Bob and Rannveig Wallis.

VISIT TO JANIS RUKSANS' NURSERY

By Bob and Marion Charman

What a wonderful treat for a Fritaholic to receive an invitation to visit Janis Ruksans' nursery in Latvia at the end of April. In his words: "My lovely parents didn't know that I will be bulb grower and September will be my most busy month and in September there are very little to be seen in my nursery too" Therefore he decided to celebrate a special birthday a few months early, and to include the anniversary of his 50th year as a bulb grower. Little did we know that we would be in a party of very experienced and respected bulb growers and nurserymen from various parts of the world.



In the greenhouse



The nursery beds

When we arrived at the nursery, we couldn't quite believe our eyes. Janis' collection of bulbs was enormous, but the number of *Fritillaria* growing both in his greenhouses and outside made us all green with envy. We saw *Frit* to name but a few, *walujewii*, *epirotica*, *verticillata*, *schliemannii*, *sewerzowii* and not a lily beetle in sight! He explained to us that in order to keep the bulbs warm in the winter when the temperature can drop as low as -25°C , he covers them all with thick mineral wool. This last winter was particular

bad with a lot of snow which lasted for weeks and caused damage to the greenhouses.

We were very lucky to have a bright, sunny day so cameras were in use everywhere. Here is a collage of just of few of the Frits in bloom. Janis was disappointed that some had gone over with their hot Easter, but there were more than enough to wet our appetites. When we returned home we looked at our small collection of Frits and wondered why we have so much difficulty growing them successfully.



Soon after we left, Janis was presented an award “The Cross of Recognition” by the President. This was for his achievements in bringing recognition to Latvia through the distribution of his bulbs. Ten years ago he was awarded the “Three Star Order” for his involvement in the gaining of independence for his country. Despite his national prominence and international reputation, Janis and his wife Guna made us feel very welcome and did all they could to ensure that we had a most enjoyable visit.



Janis Ruksans (left) receiving his award from the President of Latvia
agreement with the content

APOLOGY

The editor wishes to apologise to Mr Laurence Hill for the unauthorised use of his photograph of *Fritillaria ayakoana* in the Spring 2011 number of the journal. Its use may have implied agreement with the content of the article and would therefore be misleading.

FRITILLARIES ON CHIOS AND SAMOS ISLANDS

By Janis Ruksans

This season I planned several trips to mountainous regions – a few to Turkey and two to Greece. The main target for all of them was, of course, crocuses, but I was also looking for other bulbs, including fritillaries. In mid April I went to two large Greek islands – Chios and Samos- together with my Dutch friend, Kees Jan van Zwielen. Kees Jan isn't a bulb grower, but he travels a lot with his camera and takes wonderful pictures which you can see on his website – <http://keesjan.smugmug.com/botanical-trips>. Both islands are located very close to the west coast of Turkey, so their plants are included in the *Flora of Turkey*.

I was going to Chios mostly for two crocuses I had seen in the Gothenburg Botanical Garden – spring blooming *C.fleischeri* (In Gothenburg I saw the form from Chios with almost blackish brown stigmatic branches of incredible beauty), and autumn blooming *Crocus palasii*, named in Gothenburg as “Homeri” after the great poet, author of “The Iliad” and “The Odyssey”, who was born and lived on Chios. This one has a black flower throat and black anthers, and looks so unusual that I even wonder if it may be worth subspecies status. When my friend from Israel, Oron Peri, informed me that he had collected a few corms of Chios's *pallasii* with similar features, it only strengthened my intention to visit this island. The problem was to select the best time for my trip, as one crocus flowers in the spring and the other blooms in the autumn. My Australian friend, Marcus Harvey, told me that in May all the mountain slopes there were heavily grazed, so I compromised and went there from the 9th to 16th April – although the flowers would be finished, the corms should be quite matured and hopefully still not grazed. It turned out to be the best option – crocus leaves were everywhere, but between them we found several fritillaries.

The flight and ferry schedule were such that we spent 5 days on Chios and only one on Samos. Of course the main targets for me were crocuses, but it was a great surprise to find *Fritillaria carica* in full bloom on our first day.



Fritillaria carica on Chios Island

Surprisingly *F. carica* is not included in the marvellous book by Chris Grey Wilson “A Field guide to the Bulbs of Greece”, although it is mentioned as a Chios plant in “Flora of Turkey (8th vol.)”. It was in full bloom at an altitude of 700 – 800m, and grew between dwarf spiny shrubs in openings between sparse pine forests. Discovering this

fritillaria encouraged us to search for *F. pelinaea*, described as growing only on Chios Island.



Typical locality for *Fritillaria carica*

The picture and description of *F. pelinaea* in Chris Grey Wilson's book is somewhat misleading and confused us with the identification of the first fritillaries found on Chios, so at first I marked them as "*carica* aff." (close to *carica*). Following the field notes of Marcus Harvey about localities of *F. pelinaea*, next day we went to the peak of the highest mountain of Chios – Mount Pelinneo (1297m) for which this fritillary is named. Our car was too low for driving up by road, but the walk was nice and not very difficult. Having no information about neighbouring plants and habitats, we checked all possible plant locations on the way up, giving more attention to calciferous formations. Closer to the top we split – Kees Jan went straight up the slope, I went in the same direction but by a small side ridge, which was not so steep. I found everything – a lot of crocuses and *Muscari* growing everywhere, beautifully

blooming *Ornithogalum fimbriatum* etc. Seeing Kees Jan close to the vertical rocks where climbing up higher was impossible, I slowly turned down, thinking that we must try another road up on the other side of the mountain. Then I heard a cry from my partner – “Janis, fritillaria is here, in full bloom!”

I almost ran up the slope, which was so steep that I had some trouble with my heart. The locality where Kees Jan found the fritillary we were searching for was at an altitude of 880m, and very unusual for frits, unstable stone scree where I would never have been looking for frits, but the plants were undoubtedly true *F. pelinaea* – quite easily separable from *F. carica* by its very wide, ovate and strongly opposite bottom leaf pair. In *F. carica* the bottom leaves are subopposite and more lanceolate; the flower colour is different too. In *F. carica* the flowers are generally yellow, sometimes brownish shaded, but in *F. pelinaea* they have a distinct greenish flush on the outer tepals. Further, we found this species between shrubs lower on the same stone scree. This habit explains why the bulbs were lying so deep in the ground. The underground stem part reached at least half a metre in length, winding between stones (see attached picture). Especially special were the leaves of non-flowering plants – they were almost round. I have never seen similar leaves in other Fritillaria species.



Two views of *F. pelinaea*, the right showing greenish flush on outer tepals



“The underground stem part reached at least half a metre in length, winding between stones... The leaves of non-flowering plants... were almost round....”

The next day we repeated the same road, but went higher to the very bottom of the vertical rocks where Kees Jan saw snowdrops, to check what species were growing there. The weather dramatically changed from nice and sunny to cloudy and cold with strong winds. At the very top we were forced to run up to search for a hiding place from the snow and lightening, and to put our cameras between rocks. The temperature dropped to only 6C, so after taking some leaf samples and pictures we quickly went down and drove to lower and warmer spots on the other side of the island. There on the south slopes of Skoni Mountain we found another population of *F. pelinaea*. Here we found it at an altitude of 530m, and it was growing on stable hard clay ground hidden between very spiny shrubs. The colour and leaves clearly identified it as *F. pelinaea*.



The second locality for *F pelinaea*, on the south slopes of Skoni Mountain

Due to the rarity of this species, I didn't collect any bulbs but only checked that the bulbs there lay at the same depth as at the first locality. Both localities showed that this

fritillary prefers higher altitudes as mentioned in “Bulbs of Greece” (up to 450m). The second locality was quite far south of the localities listed in the 11th vol. of “Flora of Turkey”. I didn’t see its seed capsules, but according to “Flora of Turkey” it is separable from all other Turkish yellow blooming frits by its broadly cylindrical non-winged seed capsules. This note surprises me, as its close ally – *F. carica*- has unwinged capsules too.

We spent the last two nights and last day on Samos where, taught by our experience of Chios, we rented a mini jeep Suzuki-Jiminy. It really was an excellent choice as it allowed us to cross the highest mountain of Samos (Mt. Ambelos) by minor roads winding up and down steep slopes leading to Karvounis peak. Unfortunately many habitats there were destroyed by quite recent large forest fires, but again almost everywhere we found a lot of crocuses, only instead of *C. fleischeri* we found *C. biflorus nubigena* everywhere. As on Chios *C. pallasii* were everywhere, quite often in mixed populations with *C. cancellatus* (not seen on Chios), and only once I found *C. olivieri*, which on Chios was absolutely everywhere. Maybe it was caused just by forest fires, as *C. olivieri* tends to grow in pine forests. Here in many spots we saw another yellow frit – *Fritillaria bithynica*. It was in full bloom at altitudes from 700 – 1100m. We saw it only on spots untouched by forest fires where it was growing between shrubs and stones on quite wet clay-based soils. A straight, undivided stigma separates this species from its allies. It was reported that in some spots it was growing together with yellow blooming *F. carica*, identifiable by its trifid stigma. Although I saw some quite strongly yellowish blooming plants, the shape of the stigma confirmed that it was *F. bithynica* and I didn’t find any *F. carica* there. Seed capsules (not seen) of *F. bithynica* are usually winged too. After mid-May, when almost all the fritillaries of my collection had finished blooming, another Greek island

endemic with similar flowers started to flower in my greenhouse – *Fritillaria rhodia* from Rhodes island, easily separable by its very narrow, somewhat twisted leaves.



Fritillaria bithynica

Fritillaria rhodia

THE SEED EXCHANGE

By Pat Craven

The seed exchange depends entirely on what our members send in, so please donate as much seed or bublets as you can. And please try to separate any chaff from viable seed – having to clean seed as well as pack it increases the work enormously, and I don't want to send out material that isn't viable.

The majority of participants in the seed exchange now have email, and I send out the list to all members for whom I have an email address. A printed list will be sent **only to those members who request one**. So please:

-) Ensure that I have your up to date email address
-) If you want a printed list, write or telephone to request one.

There is generally no way of knowing that an email has gone astray (or a letter, for that matter). I expect to send out this year's list by post on Saturday 27th August, and to send the email lists out on Monday 29th August. **If you don't get your list in the week commencing 29th August, please let me know.**

In order to make the timings work, **please send all donations to reach me by Wednesday 24th August**. If you can't meet this deadline, please let me know what you intend to donate, so that I can include it in the list and send your donation as soon as possible.

Some members (even when they request bulblets) still send an ordinary envelope with inadequate stamps, or else send no s.a.e. at all. Please send padded envelopes with the correct postage.

And finally, please note my new email address.

Pat Craven, 24 Leven Road, Yarm TS15 9JE

email patcraven24@gmail.com

Tel: 01642 780109

(continued on p18)

A SELECTION OF PLANTS AT THE SPRING SHOW





- 1 Frit muraiana
- 2 Frit crassifolia kurdica large form
- 3 Frit aurea x pinardii
- 4 Frit aurea
- 5 Frit pinardii olesonderhouse
- 6 Frit frit latifolia
- 7 Frit amabilis
- 8 Frit carica
- 9 Frit sewerzowii
- 10 Frit olivieri
- 11 Frit reuteri

THE SEED EXCHANGE (cont.)

FRITILLARIA SEED FROM THE LATE JIM ARCHIBALD

Bob and Rannveig Wallis helped Jim's wife with dispersing his plants and seed, and have given the Group a substantial amount of his Fritillaria seed. There are about 200 packets, some containing a good deal of seed, and some very little, and there is wild collected seed and seed from cultivated stock. There is little information on the age of the seed – some is probably several years old, some relatively recent. How well the seed will germinate is unknown, but it is likely that in most cases some, at least, will germinate. Because the germination rate may be reduced, the packets will be as generous as possible.

I do not want to wait until the Group's seed distribution in September before dealing with this seed, because the work involved would be too great. Before I do any packing I will send out a list by email asking members to indicate what seed they would like. This will allow me to include as much seed as possible, while avoiding wasting time and expensive seed packets. If you have not received an email list by the end of July, or would like a printed list, please let me know.

The seed will cost 50per packet. I will make up the orders ahead of the main distribution, and inform members of how many packets they will get. In order to keep costs to members and the Group to a minimum, I suggest that payment be included with payment for the main Distribution, and I will send out the Archibald seed with Distribution seed orders.

GROWING NORTH AMERICAN FRITILLARIA'S IN TASMANIA

By Leslie Crowden

Half a world away from their native habitat in beautiful remote North West Coast of Tasmania these stunning bulbs have adapted to this cool temperate climate and thrived.

When I first started growing Fritillaria's 13 years ago I didn't really think about which continent certain species came from, or what their natural habitat and climate conditions were. When I was 17 I loved all Fritillaria's and wanted to grow every single one of them. It was great when I found the Fritillaria Group, especially the fantastic images and articles in the bulletins. They inspired me to keep trying some of the more difficult species and every year the seed lists gave me access to these wonderful bulbs.

As the years rolled past it became obvious that the North American species adapted well to our climate, which ranges from -3c to 30c. Our average rainfall is 80 inches and through the winter months the garden has up to four falls of snow.

For many years I grew my Fritillaria's in foam boxes, which became too much for my sister Amarlie who said that it had the artistic appeal of a cemetery. So in 2006 we bought in about 60 tones of rocks off our own farm and built them up to hip height to form a bulb rockery especially for the small bulbs. My father suggested that this would take years for me to fill up, after 12 months we were already discussing the extension! The height of the rocks gave perfect drainage and we dug in several inches of 7mm blue metal and also used it as mulch. I have found that most Fritillaria's do much better in the ground than trying to survive in pots.

The American species seemed to grow and flower quicker than others for me. It does help that some of them are generally easier to grow, such as *affinis* and *grayana* but even harder species such as *liliacea*, *purdyi* and *recurva* have not only flowered but also thrived here in the rockery. A couple of other species that I have flowered are *camscahatcensis*, *biflora*, *pluriflora*, *eastwoodiae* and *pudica*. I am still waiting patiently for *striata*, *brandegeei* and *atropurpurea* as they are only newly germinated.



Fritillaria affinis



Fritillaria grayana



Fritillaria eastwoodiae



Fritillaria pluriflora



Fritillaria purdyi

There are some I still have to try *falcata*, *agrestis*, *glauca* and *viridia* are still on my wish list. With so many diverse colours and forms of *Fritillaria*, I think this obsession will keep me occupied for the next 50 years or so.

See more at www.kaydalelodge.com.au

NEW ZEALAND FRITILLARIA GROUP

By Leslie Cox

The New Zealand Fritillaria Group had its birth in the simplest and least painful way. In 2003 the recently formed NZ Trillium Group had its first annual weekend gathering and in one of the gardens we visited, Joan Whillans asked – almost a throw away question really– “Why don’t we start a Fritillaria Group?” No sooner said than done and by the end of the weekend several people had volunteered to be involved in its organization and many potential members had supplied contact details. No one was surprised that those who grow trilliums are also growers of the genus *Fritillaria*.

The Trillium Group has always been very strong and has an annual weekend somewhere in the South Island of New Zealand. The fledgling Fritillaria Group has wished to do the same but because the flowering of the two genera is not quite coincidental, we have found it harder to arrange timing that would suit the majority of members. Two weekends with travel and accommodation costs are not an option for many members so to a large extent we Fritillaria people have centred our activities on the NZAGS annual spring show (mid September) in Christchurch, with Trillium weekends being in October or even November in the far south of the country. While this works for displaying what we grow in pots – NZAGS is happy to have a non-competitive fritillaria display as well as a couple of regular classes in the actual show– few gardens have been offered for visiting and so the group’s activities have been mostly the display itself coupled with an Annual General Meeting. The AGM has the “work” bits of course and also some general discussion about cultivation, availability et al, along with a lecture, using the experience of local fritillaria growers and a sales table mostly for small bulbs. Joan Whillans continued to lead the group until the AGM of 2008 when a small group of Otago (lower South Island) members led by Susan More from Dunedin, took on the various tasks.

Twice a year the Group produces a useful newsletter with notes about cultivation, sources of seed, information about gardens to visit, shows to attend and other items, while members contribute to an annual seedlist. For this we also buy seeds from people such as Marcus Harvey in Tasmania and Vlastimil Pilous. Marcus is always very generous and his contributions are greatly appreciated as were those of the late and much missed Jim Archibald who always sent us more seed than we could have paid for.

The Group belongs as a member to FGAGS and many of our members do so individually.

I think most members would grow from seed as there are perhaps only three or four species that are available commercially in New Zealand and even those, spasmodically. At the AGM sales table of small bulbs members will often offer the odd bulb of a rarer species and it's pleasing that people are willing to share this material.

At the beginning perhaps the main stated reason for the Group was to try and identify correctly, all the species we grow in New Zealand and to identify what we may have but under incorrect names. While of course it's good to have correct knowledge for our gardens' sake, it was particularly important because New Zealand – and now Australia too, though somewhat differently – has what we call the “permitted list” or more accurately the “Biosecurity Index/Plants.” This Index, one of several, is inherent in The Hazardous Substances and New Organisms Act of 1992. Simply, it is a long list of plants we may import into New Zealand. If it's on the list we may import it (with conditions); if it's not, we may not. The original list was put together in a haphazard way by ERMA (Environmental Risk Management Authority) and is administered by MAF (Ministry of Agriculture and Forestry) with the intention of protecting NZ's native flora and fauna from perceived threats to the flora and fauna themselves and to habitats but also to commercial or otherwise economic crops. It's not just a matter of possible weediness, but a number of different criteria could pose possible threats. I don't believe any of us would argue with the principle

here, we just wish common sense could be applied to the practice.

The Bio Index was established by asking prominent gardeners what they grew and by perusing catalogues from many nurseries both general and specialist. NZAGS were also consulted about what their members were growing and what could therefore be said to be in New Zealand already. The species on the Bio Index are deemed to be here already, so any threat if such exists, is already established. Species NOT listed are assumed not to be here and so may not be admitted IN CASE they may pose a threat. Since the initial compilation of the Index was sloppy and far from comprehensive, it follows that there are many hundreds, perhaps thousands of species that we grow but are not listed on the Biosecurity Index. Plants which we grow – and have grown since before the Act come into being – may be included on the Bio Index after we prove they were here and that they are what we say they are, which we have to do by contracting an experienced taxonomist to vouch for the plant's ID. While there is a considerable cost to this, if the proof is provided, the species may be added to the Bio Index at no further cost. However, if we wish to import a species which is not on the Bio Index, there is a massive application cost of \$1200 per species plus any additional costs involved in a risk assessment (which could include travel, research, consultation) plus GST (our version of VAT). The costs are payable even if the species is, in the finish, rejected for import so it's easy to see why virtually no-one applies for risk assessments. I believe risk assessment of a species in Australia, is free!

This leads back to it being important to identify correctly what we already have here. If it can be shown we already have this or that species even though not currently listed on the Bio Index, we may import bulbs (with, by and large impossible conditions) or seeds and so introduce further clones and genes where otherwise we may have a very restricted range or even just one clone.

There are some 80 fritillaria species listed on the Bio Index. Perhaps that should be enough for us but among others we would like to try *FF. chitralensis* and *japonica* and *dauidii*, when

material is available (we do have some very skilled growers within the Group). *F. alburyana* is not listed but has been in New Zealand since the original Albury Cheese and Watson collection in Turkey, 1966, when it entered as half a dozen tiny bulblets. It is not, therefore illegal to have *F. alburyana* but at present, it is illegal to bring it into New Zealand. Several others are here too even if not in quantity. We are thankful for the specialist growers who have loved the genus since their early alpine gardening days and try to distribute a few bulbs here or there.

So – the New Zealand Fritillaria Group is like others, a group of like-minded growers who support each other and try to indulge so far as possible, their love of this beautiful genus. Ultimately we would like to have the genus as a whole permitted entry into New Zealand but so far attempts to persuade the powers-that-be that no species constitutes a biohazard, have been fruitless. The same applies to *Crocus*, *Erythronium*, *Galanthus*, *Narcissus* and many other genera. I don't believe any genus at all, has a blanket clearance except small genera (*Jeffersonia* is an example) where every species has been cleared individually. *Tulipa*, *Iris* and many other popular genera are allowed only under a strict quarantine regime, and again, only if they are on the Bio Index in the first place. So the story goes on. In the meantime, members of New Zealand Fritillaria Group grow as many as we can locate, sow as much seed as possible and talk to each other, visit gardens and show our plants at NZAGS and two or three other local shows. Just sometimes our frustrations get the better of us, as now when invited to “do a paragraph,” I've let my typing fingers get over enthusiastic. It's just because I love this fascinating genus so much.



£3.50

