In keeping with the fluctuating temperatures and weather patterns here in the UK this month the IRG is whizzing around the world in a similarly chaotic fashion. Friends in Australia are bemoaning the rapid passing of their spring flowers as days are hitting unseasonably high temperatures – which is just what happened to much of the UK and Europe in our spring. It is distressing to have blooms last only a very short time when one has waited patiently through the winter to revel in their colourful charms. Just the sort of thing that drives gardeners to obsess about the weather, I suppose!

Cover picture: *Potentilla lignosa* - twisted stem and foliage, photo Josef Jurášek.

---Plant Portrait---

**The Luxurious Simplicity of *Lewisia* 'Norma Jean'** - a photo essay by Grahame Ware.

This plant was one of my first delights of Spring 2012. Lewisia 'Norma Jean' was hybridized by Rick Lupp of Mt. Tahoma Nursery in Washington state.

The parents are *Lewisia columbiana* f. *alba* and *Lewisia cotyledon* var. *heckneri*. Lupp relates that he tried many crosses between the two plants and this was the only one that really stood out for its overall merit. He started to sell 'Norma Jean' in about 1995. He notes that 'Norma Jean' does not set seed easily but the offspring seem true. It has all the delicate toughness of *columbiana* (with its floriferousness and branching) but with the *oomph* of the *cotyledon*. (See "Notes" below for more info).

Unlike so many *Lewisia* that are popping up at garden centres, etc., 'Norma Jean' has an airiness and delicacy about it that really appeals. Then, there is its great axillary flowering. On 'Norma Jean' each stem bears many, many soft-hued flowers. There is none of the usual dentate leaves of *heckneri* here but rather these thick-yet-thin leaves have a vertical habit that seem to launch the stems into a graceful display held well above the foliage. Note from the picture above left that the plant that has been moved up in pot size slightly from an early March 2012 purchase from Lupp himself.

It started to flower nicely in early April. This picture shows just how many flowers are produced on an individual stem. 5-6 flowers per petiole make for a sustained and impressive display of flower clusters. The petals also tend to flare back somewhat. This aspect is seen again in the next photo.

There is that unassuming species aspect that I (along with many alpine gardeners) really appreciate but 'Norma Jean' has something else - more substance without being 'over the top' and, as one would expect, more hybrid vigour.
Looking face on to a more advanced cluster shows the tendency for a flaring back of the petals. Check out the greenish eye zone. To me this adds a demure trait as well as adding subtle contrast. This element of a *luxurious simplicity* in the flowers of 'Norma Jean' is a big attraction for me. I don't always want my head zapped with colours that scream "MAGENTA!" like so many of the gross *cotyledon* hybrids (such as the 'Sunset' forms) that nursery people think we want. These plants have their place to be sure but must be used in the right context or in moderation. By comparison, the classy serenity of 'Norma Jean' is a visual oasis. She is just so harmonious.

Left: Another view of the flowers of 'Norma Jean'.

What a sweetheart! Unlike many *Lewisia*, the flowering sequence has a discerning tempo. There is a balance in the quantity of flowers that are presented at first as well as above and beyond the first flush. It's not all WHAM! followed by a shrivelling *dénouement*. Rather 'Norma Jean' unfolds tastefully with the subsequent flowering strong and steady. Okay, I admit it - I'm smitten!
As mentioned above, note the leaves that have a thin yet thick aspect (from *L. cotyledon* var. *heckneri*) and a tendency to an upright habit. Notice also the small leaves along the stem (left) which provide a launching pad for the axillary flowering. They are quite lovely unto themselves. This is a real bonus adding even more charm to 'Norma Jean'.

Below: Later that summer.... June 18th

Left: July 14th - still going strong.

**Summary**

As if the heavy spring flowering wasn't enough, Rick Lupp has stated that this plant is a "reliable Fall bloomer"!

The noted UK plantsman, author and western alpines specialist, Graham Nicholls, calls *Lewisia* 'Norma Jean' "fantastic'.

**Culture**

I would think that it would be an easy doer in the open garden given the usual caveats of drainage and exposure. Excessive winter moisture could be circumvented by nearby trees or dwarf conifers or little polycarbonate covers - "rain hats" as Ian Young calls them (right).

Granitic sand of the coarser type should be used and the crown (where the root stem meets the leaves) should have soft, round pebbles packed around it to prevent rotting. When doing this, I repeat: do not use sharp stones that might cut into the skin (epiderm) of the root thus exposing it to more rot.
As you have seen, I planted out Norma Jean into a trough given to me by my alpine buddy, Peter Bailey. It came through the winter of 2012/13 in the open without any problems. From what I’ve seen this spring you can rest assured that I will be propagating this cultivar with relish for next year’s sales. However, a few cuttings will be all that I can muster from the above plant. Everyone should seek out this hardy succulent hybrid that hails from western North America. Thanks Rick for a great plant!

Lewisia cotyledon var. heckneri is found in the Klamath Ranges in N. California at elevations of 1000’- 6000’. Chromosome count n=14.

Lewisia columbiana is the most widespread member of the genus and its chromosome count varies from 13 to 14 and 15. It can be found from the Pacific Northwest to California and inland somewhat. I am unsure which one of the subspecies of *Lewisia columbiana* that Rick used. There are three that are recognized- 1) var. *columbiana*, 2) var. *wallowensis* and, 3) var. *rupicola*. However, knowing that is like so much snow on a summer's day - irrelevant and gone in a minute.

---Gardens in the Mountains---

**Karabet Pass** by Zdeněk Zvolánek, photos Josef Jurášek

South of the famous Armenian Lake Van (now in Turkish Kurdistan) behind the massif of Mt. Artos is long limestone mountain ridge called Kavuşşahap Dag. This place is very well known because western explorers, like Erich Pasche and Jim Archibald and earlier, Peter Davis and Oleg Polunin, often visited the very high pass there with its quite rich alpine flora. In the last ten years this pass has often been visited by botanical tour companies at the best time to see bulbs in flower.

The pass is at an elevation of 2985m and is called Karabet Geçidi. Jim Archibald recommended this paradise for rock gardeners to me in 1982 and I went there with my best German friend Rudolf Weiss in 1987. We travelled there using a local Ford four-wheel minibus (dolmuş in the Turkish language) from the town of Van (going back and forth every day) to the village of Bahçesaray.

The bus was full of friendly Kurdish people with chickens and technical equipment bought in the town where transport by three-wheeled vehicles/bicycles (with big luggage boxes in the front) are still as classic a sight as they are in Pakistan. The road was very dirty and rugged with thousands of holes, pieces of limestone rocks and local ‘holy water’ running across making large fords. We stayed with Rudi under canvas and for 3 days visited the area above and under the pass. We admired there grey domes of *Acantholimon bracteatum* var. *bracteatum* and one dwarf prostrate rare, green *Acantholimon reflexifolium* with the possibility to touch it and even kiss it; Rudi called it ‘Softolimon’!
It was early July and under the Pass we saw grazed carpets of *Prunus (Cerasus) bornmuelleri*, (left) which produces small red cherries and which grows, in my rock garden, to a height of 150cm. We spotted the dwarf and difficult *Campanula coriacea*, (below) with its thick dentate leaves and many smaller pale blue flowers.

At a higher elevation, in a permanently windy spot, we saw one blue alpine flax, *Linum pycnothyllum* var. *kurdicum* (10cm high), which is not easy to please in cultivation. There are some ridges and limestone cliffs above 3200m with two small *Rosularias*, the delicate purple-violet *Campanula karanuschensis* in cracks and chinks of the rock; together with the superb cushion-forming *Gypsophila adenophylla* (a temperamental alpine plant with pale pink flowers) This Campanula is closely related to two Turkish limestone loving species - *C. bornmuelleri* and *C. hakkiarica*.

Left: This plant was tentatively identified as *G. adenophylla* for Trond Hoy who pictured it in Turkey.

The Northern walls of the pass Are hung with ornamental bonsai, probably a hundred years old, with white flowers and thick twisted branches. It is the limestone rock hugging *Potentilla lignosa* (cover and right), which also grows at 1700m and is a fascinating pre-glacial relict.

In the same area we also saw ancient *Saxifraga kotschyi* with larger hard rosettes and yellow flowers: the pollen and seed parent of many new Czech hybrids by *Karel Lang*. 
The high screes were decorated with a well-marked form of *Lamium gargaricum*.

The lower altitudes of the Kavuşşahap Mountains, south of Lake Van, offer interesting bulbs like *Fritillaria crassifolia var. kurdica* (below left) and the pale yellow *Iris (Juno) caucasia* (below right).
At the bottom of valley Jurášek photographed this magnificent *Iris paradoxa f. choschab*. We must admire his photograph of the low spiny shrub (common in all Anatolian limestones) - *Onobrychis cornuta* (below). To find its seed you must follow Jurášek’s way: brutally kick the shrub with a tough mountaineering boot.
In 1994 we (a party with Holubec, Jurášek and Joyce Carruthers) visited some high ridges under the Karabet Pass and admired seed on Veronica bombycina subsp. froederiana. It was at the end of August and the meadows down the valley were white with low Colchicum kotschyi.

Ten years later Joyce C. bravely climbed the terrible dirty road with our city Opel car and there were soldiers at the pass. The officers offered us a lunch and gave us only one hour to botanise at the pass, ordering us to travel down before the night.

The Pass was a Paradise for every bulb finder and we can share the excitement from Josef’s photos. I love the picture of this distinct Puschkinia sp. (right) from 3000m, with ice-blue flowers - the bulb has been waiting for 10 long years to be described as species nova.

(Ed.: Jānis Rukšāns is preparing to name the Pushkinia.)
It was interesting to see *Merendera kurdica* with large flowers and three lanceolate leaves; a bulbous plant which is still treated as one of the genus *Colchicum*.

Far left: *Fritillaria minima* - pictured in Turkey by Arthur Nicholls

Left: *F. minuta* – photo Josef Jurášek

Karabet is the home of the rare yellow *Fritillaria minima*, which we found flowered later than its taller sister *F. minuta*. 
All rock gardeners must consider the fact, that not all the flora of Irano-Turanian element, growing in alpine and sub-alpine regions here in Turkey is suitable for growing in hot and dry lowland gardens. We must provide for them good cool and moist growing conditions, out of the scorching sun. For example, I am able to grow *Eunomia oppositifolia* (below) in my steppe garden only in a well sheltered place on a northern slope in clayish soil.
Tulipa sprengeri - an under-rated gem

In The Rock Garden No.89, in January 1992, Alastair McKelvie, plant explorer, an Honorary Vice President of the SRGC and former editor of our Journal, wrote of Tulipa sprengeri:

“It seems strange that the commonest tulip seed sent into the Seed Exchange is that of Tulipa sprengeri, yet there are hardly any references to it in the SRGC Journal or AGS Bulletin over the years.* I first saw this splendid tulip in Mrs Knox-Findlay’s garden at Keillour in early June where a great mass of the tall cherry-red flowers in light dappled shade made a great impact, although none of the visiting SRGC Group could name it. This reinforces the point I made above about its anonymity in gardening circles. Tulipa sprengeri comes from the Amasya region of Turkey but seems only to have been collected once and perhaps no longer exists in the wild. It has 5 to 6 shiny green leaves and, in May-June, produces one or two orange-red flowers on a 40cm stem. The outer segments are yellow-buff on the reverse; the outer segments are slightly larger giving the whole flower a pointed appearance.

The few references to its cultivation and, indeed, its garden merit, are somewhat contradictory. Martyn Rix in “The Bulb Book” quotes Brian Mathew as saying that it grows well on south-facing borders in full sun, on north-facing peat banks and in grass under trees. In “Dwarf Bulbs” Brian Mathew says it is very hardy and easily grown, not needing lifting in summer. In the AGS Bulletin in 1982, A. Thompson describes it as having “brief flowers for which I can find no great enthusiasm. In its favour it grows in well in shade, unlike any other tulip I know.” However, H. Wacher, in the Bulletin in 1964, was much more enthusiastic about its lovely cherry-red flowers and its habit of seeding freely and covering large areas in a short time. I would support Brian Mathew’s opinion and say I find it a superb tulip which has the merits of flowering late, after all other tulips and of looking after itself once established. I would
definitely plant it in light moist shade where it will increase readily by seed, taking about four years to flower after germination. In bright sun it will grow perfectly well but never look as glossy green and happy as it does in shade. It looks exceptionally well grown along with Bowles’ golden grass (*Millium effusum* ‘Aureum’) especially in the evening when the glow of the yellow grass complements the cherry red of the tulip which has the added advantage of not closing up as the sun disappears.” A.D.McK. [*In the intervening years the journal mentions of this fine bulb have been equally few.*]
Roma Fiddes certainly finds no difficulty in raising this bulb from seed as it naturalises so happily in her often very cold garden in Aberdeenshire (left).

Alastair also wrote that he had found this tulip to be prone to tulip fire (Botrytis tulipae) but no-one writing about the bulb in the SRGC forum has reported this as a problem. This tulip still frequently appears in the SRGC seed exchange and it seems from its regular appearances in the Forum that it is a very popular plant - as much for its...
distinctive colouring as for its late season flowers. The plant was given an Award of Garden Merit by the RHS in 1993, which was re-confirmed in 2008. Its RHS hardiness rating is given as H4 though the experience of SRGC members suggests that H6 to H7 can be expected.

Above left: *T. sprengeri* seedheads, – said to be the delight of flower arrangers. Photo Poul Erik Eriksen

Above right: The beautiful reverse of the flowers - the cut flowers also stand well in a vase. Photo M. Young

For some (lucky!) people it is perhaps a little too eager about self-seeding, but most of us would be happy to have such a problem. It appears that the gardens where it does become over-enthusiastically naturalised are those with damper conditions. Many are struggling to get the plant established in drier gardens. The forum has a thread devoted to growing this tulip from seed - the consensus is that flowers can be expected in four years. Advice comes from members around the world, from Rodger Whitlock in Canada with a timetable for success from seed to Dirk Schnabel in Germany who shows his flourishing bulb beds of *T. sprengeri*.

Left: Close up of the flowers. Photo Susan Band.

Right: A pleasing combination planting. Photo Tim Ingram

The Scottish nurserywoman, Susan Band, calls it the “latest and best” of the tulips and Luit van Delft has shown the flowers being shown late in the season at the weekly flower show of the KAVB in Lisse. Tim Ingram in the English county of Kent has reported on a charming combination in a friend’s garden of *T. sprengeri* with the British native *Potentilla rupestris*. Why would you not want to grow this great bulb?  

M.Y.