



THE ALPINE GARDEN SOCIETY CENTRAL SUSSEX GROUP



NEWSLETTER

OCTOBER 2007

MRS. BRENDA HOLCOMBE
WITH THE AGS IN NORTH EAST TURKEY

We were treated to some of the highlights of the June 2005 AGS tour led by Bob and Rannveig Wallis which followed a route between Gulushane (south of Trabzon), east to Ararat and south to Lake Van. The flora is very rich and diverse being at the junction of three floristic regions - Lesser Caucasus, Iranian and Mediterranean with much altitudinal variation and diversity of climate. The landscape is dominated by large undulating plateaus between 1,500-2,500 m although several peaks rise close to 5,000 m. The high plateaus are subject to cold and strong winds, limiting arboreal vegetation and are ruled by the continental climate with extremely cold and dry winters, followed by rapid snowmelt and then occasional thunderstorms in the hot summer. There are mountain steppes between 1,500-2,200 m and alpine vegetation on the higher peaks. A number of species are close to extinction or extirpation. In the Ararat valley alone, 1,500 square kilometers (km²) of swamps have been drained and transformed into agricultural land.

The journey began in Trabzon on the Black Sea coast and climbed steeply through the treeline to the grassy slopes of the 2025m Zigana Pass (254/364-65, 279/101) with *Pedicularis wilhemsiana*, *Paris incompleta* (265/265), tufted *Viola altaica* in shades of cream to purple-blue, rich blue *Gentiana verna* ssp. *pontica*, pale lilac-blue *Crocus aerius* near the snow line, *Colchicum szovitsii* (304/181), small *Trollius ranunculinus*, *Ajuga orientalis* leaves and stems hairy, *Jurinella moschatus* ssp. *moschatus* (304/194) a dwarf monocarpic plant with pinnate leaves on long radiating arms and big stemless, bright pink, thistle-like flower head and *Anemone blanda* in tree shade. A view towards the large town of Gulushane, the first night's stop, with snow on the skyline. The next day, eastwards for two nights in Bayburt. On the way, swathes of yellow *Scutellaria orientalis* (258/418), *Onosma bracteatum* on very steep scree, *Paeonia mascula* ssp. *arietana* (262/420, 307/71), its flowers opening up as you watch, in scrub and scree very robust *Dactylorhiza mascula* and *D. flavescens* (sambucina group) with yellow or strong magenta flowers. *Tulipa armena* ssp. *armena* (304/193). with wavy



Pedicularis comosa

foliage. A bit higher a wide patch of *Globularia tricosantha*, short stemmed *Fritillaria latifolia* (279/102) with whopping great flowers growing only on north facing slopes. There were beautiful meadows in the wide open steppe with bright blue *Muscari aucheri*, *Dactylorhiza umbrosa* (288/217) a slender plant in the *D. incarnata* group with purplish-pink to deep magenta flowers, *Pedicularis comosa* with pale yellow flowers on a dense shortish spike and colourful Bee Eaters.



Scutellaria orientalis

There was evening time to look at Bayburt's Byzantine castle overlooking the largish town on the former Silk Route. The next day, across the steppe to spot on near bare limestone slopes with an edge of snow on the top, tall *Primula auriculata* (304/192) with *P. elatior* and up the drier and drier slope, *Fritillaria pinnardii* (284/225), the borage *Soleanthus staminus*, *Scilla sibirica* ssp. *armena*. and an ammonite fossil in the rock (a name adopted for spiral-shaped buns!). The evidence of a radio/TV mast suggests that there will be a road leading high up and so it was with the 2490m. Kop Gecide. This provided views of *Ranunculus kochii* (166/289) with the rounded, but smaller *R. ficaria*-like foliage, yellow *Draba brunnifolia*, *Crocus biflorus*, *Fritillaria alburyana* (162/367, 166/289, 304/194), its fat yellow flowers almost flat on melting snow, a dark red hybrid with *F. armena* and on a very steep slope the tongue tying crucifer *Tshitatchewia isatidea* (142/346, 184/90, 258/418-19) with very shaggy stem and foliage and sweetly scented pale violet to pinkish flowers.



Tshitatchewia isatidea

On to Erzurum for a four night stay in a comfortable hotel with rooms overlooking terraced gardens. Situated at 1757m (5766 ft - more than mile high Denver) in a flat plain overlooked by the 3000+m. Palandoken and Kargapary mountains, it has a population of 361,235 (2000 census.) Seen during the stay were *Gagea glacialis*, a *Nonea* species of the Borage family, *Fritillaria caucasica* (219/50) with broad red-brown flowers with projecting styles, woolly spikes of *Pedicularis caucasica*, red flowered *Lathyrus* and tall *Hypericum* with yellow and purple flowers and pale yellow *Pedicularis caucasica*. Clump forming *Iris taochia* (258/417, 279/102) is a bearded iris with flowers from pale yellow to deep-violet and appears to be restricted to small area north east of Erzurum on the way to the Tortum Golu reservoir with its cliffs of stratified rocks and a dangerous road.

50 miles east of Erzurum lies Horosan with a famous bridge and a splendid steam locomotive. En route in vast open plains with a lot of agriculture, *Pulsatilla albana* and all day long *Ranunculus kochii*. On slopes around the town *Wiedmannia orientalis* another borage with golden-yellow flowers, the *Oncocyclus Iris iberica* ssp. *elegantissima* (226/307, 247/35, 288/253), its huge flowers on very short stems with whitish standards and almost black, heavily veined falls and a deep purple *Verbascum*. Another TV mast on Tahir Dag south east of Horasan to see *Anemone narcissiflora* (262/418, 284/174) , thousands of *Fritillaria michailovsky* (218/328, 295/75) its reddish purple pendant bells tipped with bright yellow, the borage *Rindera lanata*, *Tulipa julia* similar to *T. linifolia*, *Iris caucasica* and *Pedicularis comosa*. In very wet meadows, golden-yellow drifts of *Caltha polypetala* (256/121, 268/145, 279/103).



Isak Pasha

So to Agri with its mixture of old (horse drawn cart) and new and over the Ipek Gedigi pass to Dogubayazit (just a few miles from Iran) with its Isak Pasha a 18th C. fortress-mosque-palace complex perched on a terrace and one of the most extraordinary buildings in Turkey, but alas, no view of Mt. Ararat (Buyut Agri Dag) until the following day when it

exposed itself in its full, volcanic glory at 5165m. (nearly 17,000ft.). There were also jolly Kurdish ladies, a stork on the top of an electric pole, *Alkanna orientalis* with hairy leaves and golden flowers and *Adonis wolgensis*. Higher up huge grassy slopes with sheep and cattle, lava flows, *Ranunculus kotchyii*, the variable *Fritillaria crassifolia* ssp. *kurdica*, tall *F. assyriaca* with its long thin leaves, *Tulipa julia*, scattered around in volcanic soil, *Gagea reticulata*, almost black flowered *Bellavalia pyrenantha* and rose-pink *Allium akaka* with one or two leaves.



Mt. Ararat



Adonis wolgensis

A return to Agri and the road south over the Isak Pass and past the 3500m Tendurek volcano, though Muradive to Lake Van. Covering 3,173 km² it is one of the largest lakes in the region. At some time during the Pleistocene, huge lava flows from the Nemrut and Sipan volcanoes just to the west and north of the present lake, extended for nearly 60 km across the southwestern end of the basin, blocking westward drainage to the Murat River and thereby transforming the depression into a lake basin. It receives a few short streams but has no outlet, so that its waters are unusually rich in sodium carbonate and other salts which are extracted by evaporation and used as detergents.

With the annual inflow higher than evaporation, the lake level continues to rise and several peninsulas became islands during the last two centuries. The northern coast road is lined with many moisture loving plants such as *Primula algida* (166/288, 179/63), the parasitic velvety-scarlet flowered *Phelypaea tournfortii*, *Dactylorrhiza osmanica* in the *D. incarnata* group and *Orchis pseudolaxiflora* like a robust *O. palustris*. Black headed buntings were also seen. The night was spent in Tatvan at the extreme south west corner of the lake, where following a 2am thunderstorm the next day was bright. A visit was made north westwards through snow banks to the boulder strewn Nemrut volcanic crater. Here tiny, yellow flowered *Fritillaria minuta*, *Euphorbia macroclada* with creeping, suckering rootstocks and white stems and *Orchis pinetorum* in the *O. mascula* group. The undulating southern coast road eventually comes to the town of Van in the south east corner of the lake. Three valleys were explored, the first south to Kigzi and up the Hoshap Su to Hoshap dominated by a powerful 17th century Kurdish fortress sitting upon a rocky pinnacle guarding the upper entrance to the Zerneke Valley. On the way, sightings of a white flowered *Cephalanthera*, thousands of the tall, narrow spikes of sulphur-yellow *Eremurus spectabilis* with orange-red stamens, *Stachys landifolia* a sub-shrub or woody based perennial with mauve-purple flowers, rounded, spiny domes of *Ononbrychis cornuta* (288/203), leaflets covered with silky hairs, *Iris paradoxa* (231/66, 277/263) and the long stalked scarlet poppy with a black basal patch *Roeimeria refracta*. This road continues into Iran and carries lorries smuggling jerry cans of cheap fuel into Turkey. Another valley is that of the Catak which runs south from lakeside Gevas with *Tulipa humilis*, *Primula auriculata*, tiny forms of *Fritillaria crassifolia* ssp. *kurdica* in scree and tight creeping mats of *Veronica orientalis* with tiny lacy pinnate leaves, covered with bright blue flowers and encrusted hummocks of *Saxifraga kotschyi* (295/62) with yellow flowers and long prominent stamens on north facing limestone cliffs. The last valley lies a little further west and this leads to the Karabat Pass (226/310, 315) and Bahcesaray where there were children and Kurdish men and women, their sheep something of a road block. Among an abundant flora, *Puschkinia 'Sheasbyi'*, *Iris caucasica*, *Merenderaa trigyna* white to purplish-pink, the leaves very short at flowering time, *Iris sari* (294/386, JSRG 116/9), the amaryllid *Ixiolirion tartaricum* linear leaves in a basal tuft, flowers pale to violet-blue, the lemon-yellow labiate *Ermostachys moluccelloides* and the *Oncocylus Iris barnumae* (283/82, 277/257) forming clumps of curved, very grey-leaves and deep purplish-violet flowers. Authority from the military should have been obtained (the road eventually leads to Iraq), but the party were let go after an hour and told not to stop on the way down!



Phelypaea tournfortii

As Edith said at the end we were punch drunk! So many flowers to be seen in only two weeks. A most interesting journey and superb photography.

AGS Bulletins: 166/285 (Van); 226/304; 304/185

Davis, P.H. 1956. Lake Van and Turkish Kurdistan: a botanical journey. Geographical Journal 122: 156-165

www.greentours.co.uk/holidays/LAKEVAN-YUKSEKOVA.asp

Flora of Pirreflit Mountain (NE Lake Van, Turkey) [journals.tubitak.gov.tr/botany/ issues/bot-07-31-3/bot-31-3-3-0607-3](http://journals.tubitak.gov.tr/botany/issues/bot-07-31-3/bot-31-3-3-0607-3)

Tactical pilotage charts TC F4D and G4B for 1:500,000 maps

For road maps of whole of Turkey use index and click on area in either of these (same maps):

http://www.adiyamanli.org/MapofTurkey/turk_map.htm

www.map-of-turkey.co.uk

See also for a good selection of online maps <http://www.lib.utexas.edu/maps/turkey.html>

RM

MEETING October 20th

New Zealand Flora ~ Richard Horswood