## Afghanistan in Bloom

Wildflowers in war zones remind us that we are still creatures of the earth, no matter how wrapped up we are in our conflicts. Unfortunately "war destroys the earth," and indeed 30 years of war has diminished the life-sustaining capacity of the land in Afghanistan. Sane individuals will refuse to support or participate in war (including refusing to pay for war). Then we can say, along with Wendell Berry, "What I stand for is what I stand on."

There is an 8-page overview of Aghanistan's flora and vegetation at www.ag-afghanistan.de/files/breckle\_flora.pdf. Afghanistan has an estimated 5000 plant species, including more than 500 members of the Composite Family (the Asteraceae). There are an estimated 100 species of *Artemisia* --the same genus as our sagebrush. Curiously there are only 13 species of orchids known in Afghanistan.



The first flower that we saw in our March 2010 journey to Afghanistan was yellow crocus (*Crocus korolkovii*), shown at left on March 5th. While certainly beautiful it was growing as something of a weed, in the disturbed ground that bordered very small, hand-tended wheat-fields. Elsewhere in the Middle East it is apparently considered a rare species.



This *Astragalus*, in the Pea Family, is one member of a large suite of plants of the alpine and sub-alpine zone in the Middle East known as 'thorny-cushions.' The alpine meadows, dominated by grasses and a variety of herbs, are heavily utilized during two months as summer pastures by nomads and the pastoral people, as they have been for nearly 10,000 years. The thorny-cushions are well protected from most herbivores by their stout thorns.



Gagea is a genus of lilies that is common throughout the Middle East, with over 100 species in that region. The species pictured is so diminutive that I included a US penny in the image for scale. These plants were growing in the dry, gravelly soil at the site of the new memorial to Ahmed Shah Masood, at the head of the Panjshir Valley.



There are a lot of *Prunus* species in the world, and this beautiful shrub, blooming in March along the Panjshir River, is one of them. Almonds, apricots, cherries, peaches and plums are all members of *Prunus*. Lacking the necessary taxonomic reference books, we were not able to identify this plant to species.



Dionysia is a spectacular genus of cliff-dwelling plants. One author defines them as 'chasmophytes'- lovers of chasms. They are endemic to the Middle East, found primarily in Iran and Afghanistan. In the spring they are completely smothered in yellow, purple, violet or pink flowers. Some species are very choosy about their habitat and only grow below overhangs, whereas other species can be found on slightly sloping rocks. In spite of being difficult to grow, a large number of species are cultivated by devoted specialists or in botanical gardens. You can read more about this genus and see images at www.dionysia4u.com. The species pictured, Dionysia tapetoides, was common in both the Panjshir and Salang river canyons.



Anemone is a genus of about 120 species of flowering plants in the buttercup family. The species picture is Anemone tschernajewii--we encountered but a few individuals blooming on a dry slope at the entrance to the Salang River canyon.



Corydalis is a genus of about 470 species of flowering plants in the family Fumariaceae. It is most diverse in China, which has over 350 species. The small species pictured here is *Corydalis afghanica*, found growing on vernally moist cliffs at the entrance to the Salang River Canyon on March 12, 2010.