What little I learned about the flowers we saw in Inland Australia, Sept. 2009

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The flowers and vegetation of Australia are so exotic for me, that I but rarely can find out where particular flowers that we find, belong in the system. The book on the plants of Western NSW, that Phil brought, was often a great help, though.

I never seem to be able to learn trees well. And also this time Phil's repeated 'lessons' in Eucalyptus (gums, boxes, mallee), and Acacias (wattles, mulga, gidgee, ironwood) had little lasting effect, I'm sad to say.

In and around Melbourne the most conspicuous plants were exotics. There was the usual yellow S. African *Oxalis*, but the two most common plants here were the yellow daisy Capeweed, *Arctoteca calendula*, and the white Onionweed, a 'lily of the fields', *Asphodeles fistulosus*. Later, in the somewhat drier areas, also the violet Paterson's Curse, *Echium plantagineum* became common, although rarely as dominant as I remember them from inland NSW back in 1993.

The first days the birds took all my interest, I suppose, as I have noted little about the plants we found. Most of all I remember many small Compositae (Asteraceae nowadays): The yellow 'buttons' *Helichrysum* (indeed also called Yellow Buttons; but there were also Billybuttons *Calocephalus*), the White Paper Daisies *Helipterum*, and the very common white or pink Aster-like Minnie Daisies *Minuria*. The also here and there very common Poached Eggs *Myriocephalus stuarti* were white and yellow, some places they were common and quite tall, while at other places there were single flowers, much shorter. Here and there very small lilies grew in profusion; they are called Early Nancy, *Wurmbea deserticola*

In the forests around Hillston we found our first Australian orchids, strange small flowers seemingly growing directly out of the sandy bottom (Many ant-lion pits here!): The Greenhoods, *Pterostylis*, were the first ones we found (Nodding Greenhood, if I

remember well), closely followed by the quaint pink 'half flowers' of the Pink Fingers *Caladenia carnea*; are similar white flowers the same species? Somewhat unexpectedly in the same genus, the Spider Orchids *C. dilatata* look quite different and much more spectacular. We found all these orchids also later on the trip, and in fact Greenhoods also grew in profusion at the place of the Bradbury's in Mt Beauty. One we never saw later on was the very low and queer brownish red Helmet Orchid *Corybas*. A tall Drosera, Pale Sundew, *Drosera peltata*, was also common here, growing on surprisingly dry sandy ground.

At Cobar there must have been rain earlier, as here lots of bushes were gloriously in bloom ('flowering gardens', said Penny); with the thousands of Woodswallows this really gave the impression of plenty, even though the local authorities had chosen these areas for depositing garbage. Wattles, of course, and the equally beautiful yellow Cassia with its roundish yellow bells. The Rattlepods Crotalaria mostly also had yellow flowers, but their fruits became large and swollen, with the seeds rattling loose in the ripe fruits. (A very special Crotalaria is the Regal Bird Flower C. cunninghamii, with large green flowers, that with some fantasy look like birds). Small bushes with strange white 'half flowers' turned out to be Fanflowers Scaevola, in the family Goodeniaceae. Here we came across our first Saltbushes Atriplex and Bluebushes Maireana and Kochia, these latter often with conspicuously coloured and quite spectacular fruits; these would follow us all through the trip, and many places made out the bulk of the vegetation. Spectacularly coloured fruits had also the Hopbushes *Dodonaea* (Euphorbiaceae), also best seen at Cobar; these have inconspicuous flowers, but the many large and colourful fruits look at first sight like flowers. Here we also found the first of the many species of Desert Fuchsia, *Eremophila;* these come in many colours; some strongly attract honeyeaters, others, i.a. the white-flowered ones, hardly at all; they are very pretty flowering bushes, and we saw one or more species of *Eremophila* almost daily

On the ground there are unmistakable Storkbills Geraniaceae, but with blue flowers; they are here called Crowfoot and belong to the genus *Erodium*. Still bluer flowers have the Veronica-like Tropical Speedwells *Evolvulus*, to my initial surprise belonging to the Convolvulaceae. The beautiful Bluebells, which I had first categorized as some

sort of lily or maybe a flax, are in reality a relative of out Harebell, and thus a Campanulaceae, i.e. *Wahlenbergia*.

There were also a few other small ground-hugging species here, one that looked like Spergularia, but which I think in reality was Purslane *Calandrinia*, a Portulacaceae. And there were also small Fanflowers *Scaevola*, in addition to the small bushes in that genus, and a small vetch-like flower with violet flowers, which I think was a *Swainsonia* (Papilionaceae, nowadays Fabaceae). Very hairy flowerheads belonged to the aptly named Pussytails *Ptilotus*, in the family Amaranthaceae., and a few times we came across small roundish 'melons', which I think were Paddymelons *Cucumis microcarpus*. Tallish flower heads looking at first sight a bit like Reseda belonged to the Stackhousiaceae, a family I had never even heard of; the species concerned is I think Creamy Candles *Stackhousia*.

Even though the trip is only weeks ago, the memories from the different areas already start to merge together, and for a few of the plant species I noted, I can no longer remember accurately where we saw them. This goes i.a. for two other creeping vaguely vetch-like Papilionaceae, the Purple Running Pea *Kennedia procurrens*, and the Broombush *Templetonia*. The famous Sturt's Desert Pea with its spectacular red flowers we only saw outside a petrol station; it is *Clianthus formosus*, a name fit for such a beautiful flower.

In the inland, close to Lyndhurst, we saw and photographed two exotic Papaveraceae, the large and very spiny pale yellow-flowered Mexican poppy Argemone ochroleuca and the red-flowered and also spiny Red Horned Poppy Glaucium corniculatum. Near the reservoir at Leigh Creek, where we walked around looking for the 'Prickleback' (Freckled Duck), the ground was covered with the small flowers of an indigenous Scrophulariaceae, either Small Monkey Flower Mimulus prostratus or Creeping Monkey Flower M. repens, I suspect the former. Here, as so many other places, we also found the aromatic Mintbush Prostanthera (Lamiaceae) as well as the alien and not very welcome Horehound Marrubium vulgare (also a Lamiaceae), which smells much less agreeably. The Lignum bushes, that we saw so much of, while we sought for grasswrens i.a. in the Bullah Overflow, is Muehlenbergia cunninghamii, in the family Polygonaceae.

In the area where we sought for and eventually found the Chestnut-banded Whiteface, there were nice violet-flowered small bushes, Sea Heath, *Frankenia*, in the family Frankeniaceae, also a new family for me. The others also found a flowering Broomrape here, *Orobanche australiensis*, which I unfortunately missed out on.

In the Flinders ranges the spectacular Butterfly Bushes were just coming into flower, large yellow flowers with red marks. This is *Petalostylis labicheoides* in the family Caesalpiniaceae. Another flowering bush here was what the Australians have called Bauhinia, because of the characteristic, twin-tipped form of the leaves; this plant, *Lysiphyllum gilvum*, also in the Caesalpiniaceae, is only a distant relative of the large Bauhinia trees of Asia. Here we also found the famous Sturt's Desert Rose *Gossypium spartianum* (Malvaceae), a close relative of the well-known Hibiscus.

In the mallee we came once more across various orchids: Greenhoods, Pink Fingers, Spider Orchids (now in full flower) and also the somewhat more showy Sun Orchids *Thelymitra pauciflora*. On bare ground, where under normal circumstances there may well be flooding in winter and spring, here and there large numbers of small yellow lilies gave a strong impression of spring in the air (which otherwise was not all that prevalent during this trip), these were Bulbine Lilies *Bulbinopsis bulbosa* and/or Leek Lilies *B. semibarbata*. Still more abundant tufts of yellow flowers, called Golden Pennants, I at first also had considered to be some sort of lily; but they were quite different at second sight, and turned out to belong to another of those unknown families, the Haloraginaceae; the species has the tongue-twisting name of *Glischrocaryon behrii*. Here were also beautiful Groundsel Senecio species, i.a. *Senecio magnificus*. Nice bushes here were the quaint and prickly aptly-named Holly-leaf Spider Flower *Grevillea ilicifolia*, and the likewise very prickly Needlewood *Hakea leucoptera*, both Proteaceae.

The bushes with the clusters of small yellow flowers here, that we saw so many of while restlessly wandering about in search of Red-lored Whistlers and Emu-Wrens, are called Desert Phebalium *Phebalium* sp, and they are in the wine family Rutaceae, while the beautiful star-like yellow-flowered bushes and smaller plants are Guinea

Flowers *Hibbertia*, in the family Dilleniaceae. In the same mallee woods there were also other bushes, clearly Papilionaceae, with smallish, but nice red and yellow flowers; these are hard to identify, apparently, but may have been *Aotus* or *Dillwynia*. There are also Myrtaceae here, the Tea Trees *Leptospermum* with their regular 5-petaled white flowers, and the Heather Bush *Thryptomene* with much smaller white flowers.

In Burra there were some conspicuous exotic flowers along the riverbank where we walked in the morning, searching for Adelaide Rosellas; I made these out to have been the White-flowered Fumitory *Fumaria capreolata* (Fumariaceae), and the False Caper *Euphorbia terracina* (Euphorbiaceae)

In the last mallee woods of the trip (Hattah-Kulkyne and Bronzewing) there were again a few characteristic plants we had not seen or noticed before----the vegetation was here quite different anyway from the mallee we had visited the day before---other geology?. I had no longer the chance to consult the book that evening, so can't tell you for sure what the Yam Daisies, so common here, are called. (Google leads me to the name *Microseris lanceolata*.) But the also very beautiful and conspicuous Golden Immortelles are I think in the genus *Waitzia*, and the tall and somewhat ungainly Fringe Lilies, growing in the clumps of spinifex *Triodos*, are in the genus *Thysonotus*.

These are only the few flowers and plants that I noted down in the evenings, and they give a completely skewed picture of the vegetation we encountered. Large areas were completely dominated by Saltbush and Bluebush, as well as a host of other salt-tolerating plants, while spinifex grass clumps almost completely covered other areas. But this may, I hope, at least be of a little help in remembering the more spectacular flowers, and maybe in labelling some pictures.

Tromsø, 8-10-2009, Wim Vader