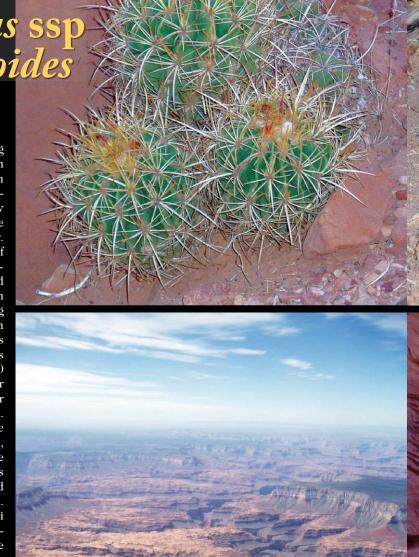
Echinocactus
polycephalus ssp
xeranthemoides

Root Gorelick

had the great pleasure of rafting down the Colorado River though Marble Canyon and Grand Canyon in late May, 2004. Although the rapids and geological features were truly spectacular, so were some of the plants growing close to the river. I felt fortunate to find a clump of Echinocactus polycephalus var xeranthemoides growing about a hundred meters from the confluence of North Canyon and the Colorado River (Fig 1), twenty miles downstream from Lees Ferry (the upstream portions of Marble Canyon). The larger stems on this individual measured about 20 em in diameter, which is still rather small. There were withered flower remains, but no fruit had formed. According to Benson (The cacti of the United States and Canada, 1982), this subspecies grows overlooking the Colorado River and its tributaries in Coconino County, Arizona and just into neighboring southern Utah. There was a surprising dearth of cacti along the river except for the ubiquitous Ferocactus cylindraceus. The scenery another hundred meters up North Canyon is lovely (Figs 2, 3), but as for other cacti, I saw only sparse occurrences of Cylindropuntia whipplei, Echinocereus engelmannii and some prickly pears. Of course, other interesting (non-cactaceous) plants inhabit Marble and Grand Canyons, include the parasite, Orobanche cooperi (Fig 4), growing on roots of Baccharis and the stream orchid, Epipactis gigantea (Fig 5).

★ Figure 1 Echinocactus polycephalus ssp xeranthemoides at opening to North Canyon.
 ➤ Figure 2 Aerial view of Kaibab upwarp, with streams descending into Marble Canyon.



in Marble Canyon





▲ (Left) Figure 4 Orobanche cooperi growing on roots of Baccharis in sand ten meters from the Colorado River at the confluence with National Canyon.

▲ (Right) Figure 5 The stream orchid, Epipactis gigantea, growing amongst scouring rushes (Equisetum arvense or Equisetum hybrid) at the waters edge inMarble Canyon.

▼ Figure 3 Opening of North Canyon, 100 meters uphill/upstream from Echinocactus polycephalus ssp xeranthemoides.