## Rare plants' regrowth out of Quairading wildfire



Matchstick banksia (B. cuneata) seedling regenerating after fire. (See also foot of page 11.)

Photo by Greg Durell.

THE wildfire that swept through remnant bushland close to the Wheatbelt town of Quairading in January 1996, causing widespread damage to the flora and fauna, may prove to be a blessing in disguise for at least three species of Declared Rare Flora (DRF).

They are: the matchstick banksia (Banksia cuneata), the stilted tinsel lily (Calectasia arnoldii ms) and the Quairading jacksonia (Jacksonia sp. Quairading).

The loss of one of the largestknown populations of the matchstick banksia was considered a significant event by the Matchstick Banksia Recovery Team, because it has provided an opportunity to study the role of fire on the regeneration of this species within an area of natural bushland.

As with most fires affecting native flora species, there is the potential for regeneration, provided the bushland is large enough to reduce external influences such as impact of faster-growing weed species, and feral animals.

## by Jackie Nichol

Fortunately, the Quairading bush remnant is large enough and contains largely infertile, sandy soil, making weed establishment difficult.

Narrogin District operations officer Greg Durell said that although the full effect of the fire was not known, it provided CALM with a rare opportunity to study native species' germination and survival.

"The resulting knowledge will also greatly enhance our efforts to restore other degrading populations of the matchstick banksia as well as other Declared Rare Flora species," Greg said.

"Since the fire, it was noticed that seed germinating species, including two of the three rare flora species, the matchstick banksia and the Quairading jacksonia, were appearing in large numbers.

"The stilted tinsel lily, although not yet re-discovered after the fire, is known to be a species that relies on seed germination for survival, hence appropriate fire regimes are also essential for the viability of this species.

"This fire is the only known summer fire within a bushland population of matchstick banksia, and so the information obtained is crucial for the species' recovery.

"Although the fire destroyed all the adult matchstick banksia plants, the subsequent germination of seedlings provides an opportunity to study the effects of competition and survival on a species that has proven difficult to establish in the field."

Staff monitoring the banksia over the next three to five years will examine the long-term influence of fire, including survival, health, competition and the effects of grazing and weeds on species establishment.

The germination of native grasses, seldom seen without fire, is just another example of the dynamics of Wheatbelt vegetation systems, and hopefully this fire will add a little more to the understanding of the role of fire in these areas.

