



Environment Protection and Biodiversity Conservation Act 1999

INCLUSION OF A PLACE IN THE NATIONAL HERITAGE LIST

I, Ian Gordon Campbell, Minister for the Environment and Heritage, having considered, in relation to the place listed in the Schedule of this instrument -

- (a) the Australian Heritage Council's assessment whether the place meets any of the National Heritage criteria; and
- (b) the comments given to the Council under section 324G of the *Environment Protection and Biodiversity Conservation Act 1999*; and

being satisfied that the place specified in the Schedule has the National Heritage value or values specified in the Schedule include, pursuant to section 324J of the *Environment Protection and Biodiversity Conservation Act 1999*, the place listed in the Schedule in the National Heritage List.

Dated 6th day of December, 2006

[signed]

Ian Gordon Campbell
Minister for the Environment
and Heritage

SCHEDULE**STATE****Local Government Area**

Name:

Location / Boundary

Criteria / Values

SOUTH AUSTRALIA**Unincorporated****Ediacara Fossil Site - Nilpena:**

About 344ha, north west of Parachilna. The precise location has not been disclosed, as provided for under Section 324Q of the *Environment Protection and Biodiversity Conservation Act 1999*.

Criterion**Values**

- | | |
|---|---|
| (a) the place has outstanding heritage value to the nation because of the place's importance in the course, or pattern, of Australia's natural or cultural history. | The Ediacara Fossil Site - Nilpena exposes an ancient Australian seafloor, revealing a spectacular array of soft-bodied marine fossils of late Precambrian age (over 500 million years ago). The site represents some of the best intact evidence of the oldest multicellular animal life both within Australia and internationally. The Ediacara seafloor assemblage has yielded some of the most spectacular early animal fossils ever discovered, providing a well preserved intact snapshot of a complete community of organisms (Gehling pers comm. 2005; Gehling, 2000; Gehling et al., 2005; Clapham & Narbonne, 2002; Clapman et al., 2003; Droser et al., 2004a; Narbonne & Gehling, 2003; Gehling et al., 2006). |
| (b) the place has outstanding heritage value to the nation because of the place's possession of uncommon, rare or endangered aspects of Australia's natural or cultural history. | Ediacara fossil sites with a diversity of species and excellent preservation are internationally rare. The Ediacara Fossil Site - Nilpena is unique as the richest and only undisturbed Ediacara fossil site in Australia. The fossils preserved at the site are uncommon with exquisite preservation of a diverse array of specimens preserved in-situ (Gehling pers comm. 2005; Gehling et al., 2005; Gehling & Narboone, 2002; Knoll et al., 2004; Gehling et al., 2006). |
| (c) the place has outstanding heritage value to the nation because of the place's potential to yield information that will contribute to an understanding of Australia's natural or cultural history. | The Ediacara Fossil Site - Nilpena contains the most abundant, diverse and intact examples of Precambrian multicellular animal life found within Australia. The excavation and laying out of extensive areas of fossil-covered seafloor for continuing study at the site makes it unparalleled in any other part of Australia. Retaining the fossils on site has also enabled a much closer scrutiny of trace fossils, which has revealed important information relating to the behavioural patterns and community associations of various taxa. The site has already contributed to our understanding of early animals and has the potential to reveal further significant information surrounding the biological affinities and relationships between the Ediacaran fauna and modern fauna (Gehling pers comm. 2005; Gehling et al., 2005; Clapham et al., 2003; Yeates 2001; Gehling et al., 2006; Jensen et al., 2006). |

- (d) the place has outstanding heritage value to the nation because of the place's importance in demonstrating the principal characteristics of:
- (i) a class of Australia's natural or cultural places;
 - or
 - (ii) a class of Australia's natural or cultural environments.

The Flinders Ranges region is regarded as the type locality for the Ediacara biota and the Ediacara Fossil Site - Nilpena is particularly rich in terms of both density and diversity of fossil organisms. As one of the few undisturbed Ediacaran sites both nationally and internationally, it represents the best example in Australia of an assemblage of the earliest multicellular life on Earth. Many entirely new species have been discovered at this site, some bearing no resemblance to any other known organism from the fossil record. The site is an outstanding example of Ediacara fossil communities (Haines, 2005; Jenkins, 1981; Knoll et al., 2004; Gehling pers. comm. 2005; Gehling et al., 2005; Gehling pers. comm. 2005; Gehling 2006).

For a description of any references quoted above, and more information on each of the places please search the Australian Heritage Database at <http://www.deh.gov.au/cgi-bin/ahdb/search.pl> using the name of the place.