

A statement for the purposes of approved conservation advice
(s266B of the *Environment Protection and Biodiversity Conservation Act 1999*)

Approved Conservation Advice for
***Elseya belli* (Bell's Turtle)**

This Conservation Advice has been developed based on the best available information at the time this conservation advice was approved.

Following taxonomic revision, the name of this species has changed and is listed under the EPBC Act as at 8 June 2013 as:

Wollumbinia belli

Description

Elseya belli, Family Chelidae, also known as Bell's Turtle, the Namoi River Elseya, or Bell's Saw-shelled Turtle, often has a pale to bright yellow streak/stripe extending from the lower jaw along the lower side of the neck, sometimes continuous with a yellow chin and throat. The head and neck are shorter in length than the shell, unlike the more common Snake-necked Turtle. The species can be very difficult to distinguish from the Saw-shelled Turtle (*Wollumbinia latisternum*).

Conservation Status

The Bell's Turtle is listed as **vulnerable**. This species is eligible for listing as vulnerable under the *Environment Protection and Biodiversity Conservation Act 1999* (Cwlth) (EPBC Act) as, prior to the commencement of the EPBC Act, it was listed as vulnerable under Schedule 1 of the *Endangered Species Protection Act 1992* (Cwlth). Bell's Turtle is also listed as vulnerable under the *Threatened Species Conservation Act 1995* (NSW), and as Least Concern under the *Nature Conservation Act 1992* (Queensland).

Distribution and Habitat

The Bell's Turtle is found only in the upper reaches of the Namoi, Gwydir and MacDonalld Rivers on the North West Slopes of NSW, with a separate population in south-east Queensland, in Bald Rock Creek near Stanthorpe (EPA, 2006).

The Bell's Turtle inhabits narrow sections of rivers in granite country, preferring shallow to deep pools in upper reaches or small tributaries of major rivers (DECC, 2005a; EPA, 2006). Inhabited pools are usually less than 3 m deep, where there is a sandy or rocky substrate with small patches of weed (DECC, 2005a; EPA, 2006). Much of its habitat is now in grazing land where introduced willow trees grow alongside gum trees on the river banks (DECC, 2005a; EPA, 2006).

This species occurs within the Border Rivers-Gwydir and Northern Rivers (NSW) and Border Rivers Maranoa-Balonne (Queensland) Natural Resource Management Regions.

The distribution of this species is not known to overlap with any EPBC Act-listed threatened ecological communities.

Threats

The main identified threats to Bell's Turtle are pollution and sedimentation of river habitat; trampling and damage to river banks and riverside vegetation by grazing stock; changes to natural stream flows through removal of water for irrigation; and predation of nests by foxes (*Vulpes vulpes*).

In some areas, Bell's Turtle also suffers from an eye ailment that can leave up to 50 per cent of an adult population blind, the cause of which is as yet unknown (ANCA, 1993; DECC, 2005a; EPA, 2006).

The species may also be periodically affected by extensive low rainfall conditions, and may be affected by global climate change.

Research Priorities

Research priorities that would inform future regional and local priority actions include:

- Investigation into the cause and extent of blindness affecting populations of this species (ANCA, 1993; EPA 2007).
- Targeted surveys to determine the full geographic range of the species, its habitat preferences, and the extent of its occurrence in existing reserves.
- Obtain information into the basic biology and ecology of the species in the field including long term monitoring of changes in population size, habitat use (including hydrological requirements) and geographic range of the species.

Regional Priority Actions

The following regional priority recovery and threat abatement actions can be done to support the recovery of Bell's Turtle.

Habitat Loss, Disturbance and Modification

- Identify populations of high conservation priority.
- Protect areas of riparian vegetation in areas of known habitat and potential habitat for Bell's Turtle.
- Ensure chemicals or other mechanisms used to eradicate weeds or for agriculture do not have a significant adverse impact on Bell's Turtle.
- Manage any changes to hydrology that may result in changes to water table levels, increased run-off, sedimentation or pollution.
- Establish aquatic reserves (including adjacent terrestrial habitats) in those reaches of the Namoi and Gwydir River drainages identified as prime habitat for the species.
- Monitor known populations to identify key threats.
- Monitor the progress of recovery, including the effectiveness of management actions and the need to adapt them if necessary.

Animal Predation or Competition

- Manage known sites in reserve areas and on private property to control foxes.

Diseases, Fungi and Parasites

- Develop and implement suitable hygiene protocols to prevent further outbreaks of the blindness once a cause is identified.

Conservation Information

- Raise awareness of Bell's Turtle within the local community, particularly among landholders.

Local Priority Actions

The following local priority recovery and threat abatement actions can be done to support the recovery of Bell's Turtle.

Habitat Loss, Disturbance and Modification

- Control access routes to suitably constrain public access to known sites on public land.

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- Undertake survey work in suitable habitat and potential habitat to locate any additional populations.
- Develop management plans to maintain or restore natural river flows to catchments.

Trampling, Browsing or Grazing

- Establish stock watering points away from riverbanks in order to protect riverbanks from stock trampling to protect water quality and nesting sites.
- Establish exclusion fencing along river banks on private and public land to reduce grazing pressure.

Animal Predation or Competition

- Implement relevant threat abatement plans or feral animal management plans.
- Manage threats at known sites in reserve areas and on private property to control foxes.

This list does not necessarily encompass all actions that may be of benefit to the Bell's Turtle but highlights those that are considered to be of highest priority at the time of preparing the conservation advice.

Existing Plans/Management Prescriptions that Could Affect the Species

- NSW Threatened Species Priority Action Statement for *Elseya belli* (DECC, 2005b), and
- Threat Abatement Plan for Predation by European Red Fox (EA, 1999).

Information Sources:

Australian Nature Conservation Agency (ANCA) 1993, *Action Plan for Australian Reptiles Elseya belli*, viewed 11 March 2008,
<<http://www.environment.gov.au/biodiversity/threatened/publications/action/reptiles/4.html>>.

Department of Environment and Conservation (DECC) 2005a, *Threatened Species Profile Database*, Bell's Turtle, viewed 11 March 2008,
<<http://www.threatenedspecies.environment.nsw.gov.au/tsprofile/profile.aspx?id=10266>>.

Department of Environment & Climate Change (DECC) 2005b, *Elseya belli - Priority actions* (NSW Threatened Species Priority Action Statement), viewed 11 March 2008,
<http://www.threatenedspecies.environment.nsw.gov.au/tsprofile/pas_profile.aspx?id=10266>.

Environment Australia (EA) 1999, *Threat Abatement Plan for Predation by European Red Fox*, Biodiversity Group, Environment Australia, viewed 11 March 2008,
<<http://www.environment.gov.au/biodiversity/threatened/publications/tap/foxes/index.html>>.

Environmental Protection Agency (EPA) 2006, *Bell's Turtle*, viewed 11 March 2008,
<http://www.epa.qld.gov.au/nature_conservation/wildlife/az_of_animals/bells_turtle/>.