The Threatened Species Scientific Committee is charged with providing the Minister for the Environment with independent scientific advice to achieve biodiversity conservation outcomes, specifically for threatened species and ecological communities under national environment law.

The Committee is working with partners, experts and the wider community, to enable the statutory response to the 2019-20 bushfires to be timely and robust.

In March 2020 the Committee published its **10-point Bushfire Response Plan**, which sets out four key objectives and ten actions to deliver an efficient and effective response that supports bushfire recovery. These objectives align with the priorities identified by the specially convened *Wildlife and Threatened Species Bushfire Recovery Expert Panel*.

This document updates the Committee’s progress during the first year of delivering the plan.
A. Prevent extinction and limit decline of native species and ecosystems affected by the 2019-20 fires

<table>
<thead>
<tr>
<th>Action</th>
<th>Progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Many unlisted species and ecological communities urgently require statutory protection as a result of the 2019-20 fires, and many listed species and ecological communities need re-assessment because their conservation status has deteriorated.</td>
<td></td>
</tr>
<tr>
<td>1. Advise the Minister on species and ecological communities that may be eligible for listing and uplisting as quickly as possible</td>
<td></td>
</tr>
<tr>
<td>a) Prioritise species and ecological communities for conservation status review, using the information on species and ecological community fire vulnerabilities, collated by the Wildlife and Threatened Species Bushfire Recovery Expert Panel.</td>
<td></td>
</tr>
</tbody>
</table>

The Environment Protection and Biodiversity Conservation Act 1999 (the EPBC Act) is the Australian Government’s central piece of environmental legislation. It provides a legal framework to protect and manage threatened flora, fauna, ecological communities (a naturally occurring group of native plants, animals and other organisms that are interacting in a unique habitat), migratory species, internationally important wetlands and nationally and internationally important heritage places. These are defined in the EPBC Act as ‘matters of national environmental significance’.

Listing of species and ecological communities as threatened involves a robust assessment of the available scientific evidence against specific criteria. The Committee invites public and expert comments on each assessment.

To identify and prioritise fire affected species and ecological communities for assessment, the Committee has worked with experts from the Bushfire Recovery Expert Panel, state and territory governments, the National Environmental Science Program Threatened Species Recovery Hub, the International Union for the Conservation of Nature and other scientists. So far, 116 species and 7 ecological communities affected by the bushfires, have been included in the 2020 Finalised Priority Assessment List, which is the formal workplan of the Committee.

These species and ecological communities are undergoing an assessment, either for adding to the list or transfer to a higher threatened category.

The prioritised species include:
- 14 bird species
- 75 plant species
- 7 fish species
- 7 mammal species
- 5 reptile species
- 4 frog species
- 2 spider species
- 1 snail species
- 1 grasshopper species

The prioritised ecological communities include:
- 1 grassy forest
- 2 cool temperate rainforests
- 2 moist forests
- 1 floodplain Eucalypt forest
- 1 wet sclerophyll forest

Long-nosed Potoroo

Sawn Rocks, Mt Kaputar National Park
A. Prevent extinction and limit decline of native species and ecosystems affected by the 2019-20 fires

<table>
<thead>
<tr>
<th>Action</th>
<th>Progress</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ON TRACK</td>
</tr>
<tr>
<td></td>
<td>COMPLETED</td>
</tr>
</tbody>
</table>

Many more native species and ecological communities potentially require assessment because they are impacted by the fires. The Committee is reviewing new information as it becomes available to understand the impacts of the fires on the status of these entities at a national level, and to determine if, as a result of the fires, they require additional protection under the EPBC Act. The Committee will recommend further species and ecological communities to the Minister as priorities for assessment.

2. Accelerate processes for assessment and re-assessment of priority species

a) Update listing assessments for fire-affected species and ecological communities already on the Finalised Priority Assessment List.

The impacts of the bushfires have been included in assessments that are already underway for fire-affected species and ecological communities.

Since April 2020, the Minister for the Environment has made decisions to list, transfer or retain 11 fire-affected species as threatened. The level of fire-impact varies, with some species only moderately affected while others were more severely affected. In summary:

- Three mammal species badly affected by the bushfires, although showing early signs of recovery, retained their Endangered status. These are, the Smoky Mouse (*Pseudomys fumeus*), Hastings River Mouse (*Pseudomys oralis*), and the south-east mainland population of the Spotted-tailed Quoll (*Dasyurus maculatus maculatus*).

- Two plant species, the Scrub Turpentine (*Rhodamnia rubescens*) and Native Guava (*Rhodomyrtus psidioides*), are included in the Critically Endangered category due to the impacts of the bushfires and the disease Myrtle Rust.

- Two fire affected plant species were uplisted from the Vulnerable category to the Critically Endangered status - Budawangs Wallaby-grass (*Plinthanthesis rodwayi*) and a mint bush (*Prostanthera staurophylla*).

- Two previously unlisted fire-affected plant species are now listed. The Gorge Rice-flower (*Pimelea cremnophila*) was added to the Critically Endangered category, and a paper daisy (*Helichrysum calvertianum*), was added to the Vulnerable category.

- A previously unlisted fire-affected fish species, the Stocky Galaxias (*Galaxias tantangara*), was added to the Critically Endangered category.

- The Buttercup Doubletail (*Diuris aequalis*), a fire affected orchid, was transferred from the Vulnerable category to the Endangered category.
A. Prevent extinction and limit decline of native species and ecosystems affected by the 2019-20 fires

<table>
<thead>
<tr>
<th>Action</th>
<th>Progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>b) Defer assessments for other species on the Finalised Priority Assessment List that are not fire-affected, and where listing is unlikely to confer a conservation benefit (e.g. species being considered for listing as Extinct).</td>
<td>ON TRACK 🔴 COMPLETED 🔴</td>
</tr>
<tr>
<td>c) Fast-track threatened species list alignment for fire-affected species with the States and Territories through the Common Assessment Method.</td>
<td></td>
</tr>
<tr>
<td>d) Identify opportunities for collaboration with professionals with the capacity to efficiently create draft assessments to TSSC standards for subsequent review by the TSSC e.g., IUCN specialist groups, other specialist taxonomic groups and the States and Territories.</td>
<td></td>
</tr>
</tbody>
</table>

To ensure focus remained on the urgent task of assessing fire affected species and ecological communities, the Committee reviewed all listings underway prior to the bushfires, to evaluate whether any could be deferred. The Committee agreed that no listing assessments would be postponed.

The Australian Government and all states and territories in Australia have established a common method for the assessment and listing of threatened species. Known as the common assessment method, this ensures scientific rigour in the assessment and listing of threatened species nationally, and provides an efficient and harmonised process to support consistent national protection for Australia’s threatened species. Through the common assessment method, states and territories have assessed fire-affected species and provided these assessments to the Australian Government for consideration by the Committee, and a listing decision under national environmental law. As a result, eight fire-affected species were consistently nationally listed, including the Budawangs Wallaby-grass (Plinthanthesis rodwayi) and a fish species the Stocky Galaxias (Galaxias tantangara), both of which had the majority of their known habitat impacted by the fires.

The Committee has, through the involvement of some members, collaborated with the Department of Agriculture, Water and the Environment (the Department) to provide advice on the development of the Species Expert Assessment Plan project. Through this project, scientific experts will be contracted to deliver listing assessments and conservation advices that meet EPBC Act requirements for large groups of species and ecological communities at an accelerated rate. The groups include freshwater fish, freshwater turtles, three groups of plants, lizards and snakes, terrestrial mammals, frogs, and rainforests and wet forests of south-east Australia. Both fire affected and non-fire affected species are in scope. This will support bushfire recovery, environmental resilience and preparedness for future fire events by developing EPBC Act lists that are as current and accurate as possible, with fire-affected species and ecological communities awarded protection under the Act that is commensurate with their post-fire status.
A. Prevent extinction and limit decline of native species and ecosystems affected by the 2019-20 fires

<table>
<thead>
<tr>
<th>Action</th>
<th>Progress</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ON TRACK</td>
</tr>
</tbody>
</table>

Through an open tender process, contracts will be awarded in June 2021. This complements other listing assessment actions underway in the Department and through collaboration with the states and territories.

The Australian Government and the [International Union for Conservation of Nature](https://www.iucn.org) have agreed to cooperate in the assessment of fire-affected species and ecosystems. Greater input from international threatened species experts will increase the capacity of the scientific community in Australia to undertake this work.

3. Support immediate post-fire recovery efforts by appending information on fire impacts and key actions to support recovery to the Conservation Advices and Recovery Plans of fire-affected species and ecological communities. Key actions (including cultural practices) will align with the priority activities identified by the Bushfire Recovery Expert Panel.

The Committee and Department are compiling a priority list of fire-affected species that have existing conservation advices and recovery plans, and updating these documents to include the impacts of, and management response to, the 2019-20 bushfires. The first set of conservation advices have been prioritised based on the level of fire impact, and 37 updated or new species conservation advices are currently being assessed by the Committee.

4. Respond to community interests about the impacts of the 2019-20 fires on biodiversity

a) Accept public nominations for assessment and re-assessment of species and ecological communities at any time and continue to consider them in Proposed Priority Assessment List processes unless clearly ineligible for listing.

With the agreement of the Minister, the Committee is continuing to accept public nominations of fire-affected species and ecological communities at any time. To date, nominations for two species and two ecological communities have been prioritised for assessment based on public nominations. The two ecological communities are the Araluen Scarp Grassy Forest and the Brogo Wet Vine Forest. The species are the Kangaroo Island Micro-trapdoor Spider (*Moggridgea rainbowi*) and the Kangaroo Island Assassin Spider (*Zephyrarchaea austini*). These spiders are not found anywhere else and were both severely impacted by the intense fire on Kangaroo Island in South Australia.
A. Prevent extinction and limit decline of native species and ecosystems affected by the 2019-20 fires

<table>
<thead>
<tr>
<th>Action</th>
<th>Progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>b) Engage and consult with Indigenous communities and non-Indigenous stakeholders to improve fire management response in conservation and threat abatement planning.</td>
<td>ON TRACK</td>
</tr>
</tbody>
</table>

The Committee and Department are working to encourage Indigenous collaboration and partnerships, and outreach to a range of non-Indigenous stakeholders, in recognition of both the importance of bushfire recovery to these groups and their critical role in that recovery. Through the Species Expert Assessment Plan project, engagement with Indigenous communities supports the inclusion of Traditional ecological knowledge and recognition of Culturally Significant Species and Entities to appropriately inform listing assessments and conservation advices. In addition, funding managed by the Department under the Bushfire Recovery for Wildlife and Habitat program is supporting Indigenous fire and land management workshops across Australia. These targeted competitive grant opportunities enable Indigenous-led knowledge exchange of Indigenous fire and land management practices, and increased understanding of the interaction of these practices with plants, animals and ecological communities.

![Traditional knowledge](image1)

![Traditional burn, Kimberley, WA](image2)

c. Consider potential for listing/uplisting of species that are highly valued by the community (e.g. Koala) by undertaking preliminary evaluations immediately.

The Committee and Department have worked in partnership to undertake preliminary evaluations for the Koala and the Greater Glider. As a result, both species are included on the 2020 Finalised Priority Assessment List and are under assessment. The Committee will continue to undertake preliminary evaluation of other fire-affected animals, plants and ecological communities.

![Greater Glider](image3)

![Koala and young](image4)
B. Reduce impacts from future fires

<table>
<thead>
<tr>
<th>Action</th>
<th>Progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Update the Conservation Advices for the highest priority fire-affected species and ecological communities to include the impacts of, and management response to, the 2019-20 fires; the potential impacts and management of future fires and the information needs, key conservation actions and resources that will be needed to support longer-term recovery.</td>
<td>ON TRACK</td>
</tr>
</tbody>
</table>

A priority tranche of species conservation advices based on the level of fire impact, are under review. As at early-May 2021, approximately 90 of these have been drafted, 37 of which are currently being assessed by the Committee.

Buttercup Doubletail

6. Complete the assessment of the ‘fire regimes that cause biodiversity decline’ Key Threatening Process and develop guidance on recovery actions to build the resilience of biota to future fires.

An updated draft assessment of the ‘Key Threatening Process: Fire regimes that cause biodiversity decline’ was considered by the Committee in March 2021. The Committee is undertaking further review, via targeted consultation prior to public consultation, to provide advice to the Minister in 2021. The assessment is particularly complex, requiring consideration of multiple aspects of fire and biodiversity management in Australia.

Bushfire

At the conclusion of the 2019-20 fire season, the list of threatened species and ecological communities comprised 1,890 species and 84 ecological communities. As assessments of fire-affected species and ecological communities progress, the change in the list resulting from the fires will be quantified. As of early May, the list of threatened species and ecological communities comprised 1,917 species and 87 ecological communities. Listing decisions for 11 fire-affected species have been made during the past year, with the remainder of the changes to the list being from assessments of species that were not fire-affected that had been prioritised for assessment prior to the fires.

8. Acknowledge the changed situation following the fires in the application of the listing criteria, review the adaptations adopted by the Committee and distil lessons for future responses to biodiversity crisis events.

The scale of the 2019-20 bushfires was unprecedented and brings a number of challenges for assessing impacts on species and ecological communities. As these challenges are being worked through, care is being taken to document the lessons learned, update assessment processes to reflect the changed context and clarify key issues, such as defining a threat-based ‘location’ in the listing criteria, so they are considered in future assessments.
D. Communicate the TSSC’s role and activities in response to the fires

<table>
<thead>
<tr>
<th>Action</th>
<th>Progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. Maintain close communication with the government response, including the Bushfire Recovery Expert Panel, the Threatened Species Commissioner and the Minister for the Environment.</td>
<td>ON TRACK</td>
</tr>
</tbody>
</table>

The Committee continues to work closely with the Threatened Species Commissioner and the Minister for the Environment on a coordinated response to bushfire recovery. This is being achieved through regular meetings between the Minister and the Chair of the Committee, discussions about bushfire recovery efforts with the Threatened Species Commissioner at each Committee meeting, and active co-ordination by the Department between the Committee, the Threatened Species Commissioner’s Office and the Minister’s Office.

The Committee’s bushfire response continues to be informed by the work of many researchers, including the Bushfire Recovery Expert Panel who acquitted its responsibilities in accordance with the Terms of Reference at the end of September 2020. Former members of the Bushfire Recovery Expert Panel are also Committee members who provide valuable continuity and strategic insight as a result of their dual roles.

10. In partnership with the Minister’s office and the Department, communicate to the broader conservation sector, Indigenous communities and general public, the TSSC’s planned response to the impacts of the bushfire on biodiversity, including the focus on collaborative action, and provide updates on progress.

Eight monthly updates from the Committee will be published online.

For further information contact:
Threatened Species Scientific Committee Secretariat, Department of Agriculture Water and the Environment
Phone: 1800 803 772 or 02 6274 1111 Email: TSSCSecretariat@environment.gov.au