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SA trout industry is swimming against tide of biodiversity priorities

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CONCERNS have recently been raised about the government's alleged intention "to destroy the trout-fishing industry" because of draft regulations on invasive alien species that list as invasive 561 alien plant and animal species, including two species of trout.

Generally, invasive alien species harm ecosystems and the services that ecosystems deliver to people.

The problem of invasive alien species is rapidly growing and has to be addressed if the substantial effects are to be avoided.

It is necessary in this debate to distinguish between alien species that do no harm and are benign or useful, and those that are harmful. Useful alien species include most of

our non-invasive crops, livestock, garden plants and pets.

The planned eradication of invasive and harmful alien species (pests or weeds) that have little or no use is not controversial. But there is another category of invasive species that provide benefits but also do harm. Trout is one.

Trout were introduced into South Africa over 100 years ago, with the full and active support of nature conservation authorities. Trout proved to be well-adapted to some high-altitude, cool mountain streams in South Africa. They established self-sustaining populations that rapidly invaded virtually all suitable reaches of these streams. Today trout play an important role in aquaculture, recreation and tourism, providing

considerable economic benefits. It may then, seem inappropriate to try to regulate the trout industry.

However, South Africa's mountains in streams are home to a large number of relatively small indigenous fish, frogs and invertebrate species that are found nowhere else on Earth, and South Africa, as a signatory to the Convention on Biodiversity is obliged to protect them.

The loss of biodiversity is an issue of global importance, not to be underestimated. Leading scientists warn of the dangers of allowing this erosion of species to go unchecked, as it will have serious consequences for life on Earth.

Trout are voracious, invasive predators, that spread quickly and consume indigenous fishes, frogs

and invertebrates, leaving the streams biologically impoverished.

Two indigenous fishes (the Eerste River redfin minnow, and the Maluti redfin minnow) have already been driven to extinction in rivers where trout have been introduced. In other South African rivers where trout have been introduced, most of the smaller indigenous fish are now only able to survive in the lower and warmer reaches of rivers where trout cannot live, or where barriers such as waterfalls or weirs have prevented the invasion by trout.

In these lower reaches, the indigenous fish are under threat from pollution and degradation. Wholesome changes to the communities of plants and animals that characterise healthy ecosystems can only be detrimental,

but have been poorly researched in South Africa, making this aspect difficult to quantify. It would thus be prudent to protect at least a representative sample of these ecosystems until the effects of invasion are better understood.

The government's response has included setting aside protected areas, initiating invasive species control programmes, and passing relevant legislation. Protected areas cover a relatively small proportion of the country but they provide a valuable reservoir of indigenous species. In protected areas, all threats to indigenous species should be managed to try to prevent cascades of extinction. And there are many areas outside reserves, where unique biodiversity also needs to be protected.

In the case of trout, is it possible to meet the goals of conservation and of economic activity and development simultaneously? And if possible, what trade-offs would be needed? The proposals in the draft regulations on invasive alien species are clear in this regard. Far from advocating "an intention to destroy the trout-fishing industry", they make innovative proposals for both exploitation and conservation.

They will clearly allow the industry to continue to operate profitably in given areas while allowing for the protection of South Africa's unique biodiversity and ecosystems.

South Africa is leading the world in developing such legislation. The government has gone out of its way to accommodate the concerns of

stakeholders, and to make concessions, while standing firm by ensuring that the country's ecosystems and their unique component species are protected.

The trout industry has every right to highlight the benefits of trout. But a truly constructive approach would be to recognise the concerns of other parties and make some concessions of their own. We owe it to the world and future generations not to leave them a biologically impoverished world in which life would at best be less interesting; at worst unable to sustain us.

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