



COUNCIL ON ANIMAL AFFAIRS

FISH WELFARE

SUMMARY

The purpose and activities of the Council

The Council on Animal Affairs (Raad voor Dierenangelegenheden, RDA) is an independent council of experts, which advises the Minister for Agriculture, Nature and Food quality. This advice is submitted on request and by the Council's own initiative regarding complex, multidisciplinary issues relating to animal health and welfare. The RDA currently comprises some forty experts with a wide range of backgrounds and expertise, who serve on the Council in a personal capacity, independently and without any outside influence.

The Council on Animal Affairs considers issues across the entire spectrum of animal policy: on captive ("domesticated") and non-captive ("wild") animals, smallholding, or hobby farm animals, companion animals (pets), commercially raised animals and laboratory animals.

The Council records the conclusions of its deliberations in opinions. These documents provide an overview of the scientific and societal background to various issues, and include recommendations on policy options and avenues for resolving potential problems. Consensus is not a requirement for the inclusion of opinions; an opinion may contain views held by a minority of Council members.

Foreword

Fish are important to humans in a number of ways: for their beauty, as a source of food, or as part of recreation and sport. Despite this fact, they receive less attention than other vertebrates in discussions on animal welfare, while our scientific understanding of fish welfare is increasing. The Council on Animal Affairs (RDA) has therefore raised the question of whether recent social and scientific developments warrant a change in the way we treat fish. In answering this question, a distinction has been drawn between various categories of fish according to their relationship and contact with humans. For each category, a response is given to the question of whether a change is necessary, along with a summary of any barriers to be addressed.

The Council has recorded the results in an advisory report, and condensed them into this citizens' summary in the hope of reaching a wider audience. The complete report is available for download on the RDA website: www.rda.nl.

The Hague, February 2018



Jan Staman, Chair



Marc Schakenraad, First Secretary

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SUMMARY



RAAD VOOR DIERENAANGELEGENHEDEN

Fish welfare

Unsolicited advisory report

Question: Society devotes less attention to the welfare of fish than to the welfare of other vertebrates. The Council wonders whether this is justified: is fish welfare an issue, or a non-issue? And are there any developments that justify placing fish welfare higher up on the social agenda?

Background: Fish welfare has increasingly occupied the social spotlight in recent decades, both scientifically, and in the media and society as a whole. Martin Scholten (chair of the panel that prepared this report) explains that the Council believed this was reason enough to investigate the issue, despite the lack of any immediate urgency or social uproar. ‘We thought about it and realised, hang on, this is a group of vertebrates that is often ignored in welfare debates. Is that justified?’

Considerations: Scholten goes on to say that the panel first conducted a broad survey of knowledge and social understanding on fish welfare: ‘There is currently no scientific consensus on what fish experience. For a long time a discussion has been underway on whether fish are capable of experiencing things like pain, discomfort or stress. There is one scientific camp that does not believe so, however society and other scientific communities are now convinced that fish can experience pain in the same manner as other, more evolved animals. This growth in knowledge is partly due to the development of new



Forum chair Martin Scholten



technologies for measuring aspects like the responses of fish to certain stimuli.’ Scholten reports that the panel ultimately established what we currently know about what fish feel, and identified the various ways in which humans have control over the lives of fish. ‘There is commercial fishing, recreational fishing, laboratory research, aquarium fish, aquaculture and more. The report deals with eight separate categories of fish, all of which include interactions with humans that affect their welfare, such as capture, husbandry, or slaughter.’

One complicating factor is the enormous variety of fish species. ‘The concept of “fish” covers enormous evolutionary ground. There are intelligent fish, and fairly brainless fish. Which are we talking about? A relatively smart shark or ray, or a simple sand lance? They are not the same thing.’ While it is important keep such differences in mind, the panel did not wish for a variety of conclusions to be drawn for all the different categories. There should be variety in practice – indeed, this is an important consequence of the report – but not when it comes to the fundamental question of whether humans should be concerned about the welfare of fish. Scholten says: ‘A broad consensus is slowly emerging that fish are sentient beings, which confers a duty of care onto society.’

Recommendation: Particularly due to advances in scientific understanding, the Council on Animal Affairs sees reason to devote greater attention to fish welfare than has been the case until now. In addition to being desirable, this development is also possible, says Scholten. ‘Via a tailored approach, it should be possible for policy to facilitate good practices in various categories – even without the addition of numerous new regulations, which we see no reason for. Fish welfare remains something of a forgotten stepchild in scientific research. There is capacity for increased effort in this area, as well as greater opportunities for innovation in the private sector to improve welfare for fish. Fish welfare has the potential to be a unique selling point (USP), similar to the current approach taken in the Better Living system run by the Dutch Society for the Protection of Animals. And to society at large we also wish to say: be assured that fish are sensitive, feeling creatures. Remember that from time to time.’

Panel chair Scholten concludes that in general, fish deserve to be ‘included’ in thought and action when it comes to welfare, whether as a part of policy, research, industry or society.

Brief summary of content

Fish play various roles in Dutch society. We eat, catch and farm them, admire them in our homes and professional aquariums, and use them as laboratory animals for testing purposes. Depending on their purpose, fish care falls under a range of laws and regulations. These regulations currently make little to no mention of fish welfare, however. Attention to fish welfare has gradually increased in recent decades, in policy, research and society as a whole. The ethical question of how we wish treat animals in general (and here, fish in particular) is being raised with increasing regularity. In light of this increasing attention, the Council on Animal Affairs (RDA) has conducted a closer examination of fish welfare.

Two key questions were considered:

1) Do understandings in society and scientific literature warrant greater concern for the welfare of fish, and give cause to update the government's current policy position in this respect?

If so, question 2 follows:

2) What key aspects and developments can best be addressed to promote the welfare of fish, and what impediments are envisaged (if any)?

Nine categories of fish apply when answering these questions. The category of fish that live in the wild and are not caught is left aside here, as the focus of this report is on the direct interaction between people and fish. The following eight categories are addressed, however:

1. Pelagic sea fishing^I
2. Sea-floor fishing
3. Recreational fishing
4. Inland fishing
5. Aquaculture
6. Trade in, and the commercial husbandry of, ornamental fish (public aquariums)
7. Fish in private homes
8. Fish used in research (laboratory animals)



Photo: Frans Hoek

A traditional type of fishing on the Dutch Westeinder plas.

^I Pelagic fish are those that live in schools and can be found throughout the water column, from just above the sea bed to the water's surface; often these fish do not approach the coast.

Many of the laws and regulations governing fisheries, aquaculture and trade in ornamental fish in the Netherlands are based on EU regulations. The Netherlands also has its own policy in this regard. Few regulations address fish welfare – no parts of the EU Common Fisheries Policy (CFP) address welfare directly, for example. In the Netherlands, the use of living fish as bait is prohibited on welfare grounds. The European Transport Directive outlines the criteria applicable to the transport of living vertebrates, which includes fish. In order to keep fish as production animals, the species must be listed in the relevant appendix to the Animal Husbandry Decree (*Besluit houders van dieren*). To qualify for inclusion on the list, certain criteria must first be met, including some relating to welfare. The killing of animals (including fish) is also subject to EU regulations aimed at reducing pain and distress. Additional welfare regulations are under development in the Netherlands concerning the stunning of eel before they are killed. There is almost no legislation that applies specifically to ornamental fish, aside from the general care requirements outlined in the Animal Husbandry Decree. Traders are also obliged to inform non-professional customers of the care, housing, behaviour and costs of keeping a fish as a pet.

More fish welfare regulations exist in the private sector, such as the air transport regulations by the International Air Transport Association (IATA). Rules of conduct for recreational fishing are distributed by the Dutch Angling Federation (*Sportvisserij Nederland*) and for zoos by the Dutch Zoo Federation (*Nederlandse Vereniging van Dierentuinen, NVD*). Various privately organised quality marks for edible fish incorporate welfare regulations, and sector association Dibevo has a quality mark that includes aspects of animal welfare.



Fishing for flatfish: the net is being collected

In terms of government policy, increasing attention to the welfare of animals (and specifically fish) has been observed in both the Netherlands and the European Union. In its Recommendations Concerning Farmed Fish (2006), for example, the Council of Europe stipulates that fish farmers must cater for the biological characteristics and needs of the animals under their care. Dutch policy, set down in legislation such as the recent Animals Act (*Wet Dieren*), regards fish as sensitive creatures to which a duty of care applies.

Ongoing scientific research is giving weight to the claim that fish can feel pain. In 2017, for example, the European Food Safety Authority (EFSA) argued that fish should be treated in the same manner as mammals and birds when it comes to consciousness and welfare. There are also major differences between fish species, and much of the necessary knowledge is still missing.

In society as a whole, fish welfare is still not as 'attractive' as the welfare of birds or fish, for example. Still, animal welfare organisations (along with the media) are

devoting more and more attention to fish and their welfare. Existing sustainability characteristics continue to focus mainly on fish populations, however, rather than the welfare of individual fish.

In the Netherlands, respect for the intrinsic value of animals – which therefore includes fish – is set out in various laws. The Council believes that this entails a moral responsibility to show concern for the animals and their welfare, health and integrity. Additional interests and values are also at play, usually related to the context in which the animals are used and their status. All of the above should ultimately determine the extent to which we cater for the needs of animals, how we fulfil our duty of care and what level of animal welfare we wish to realise in certain practical contexts. For evaluation purposes, the Council recommends the One-Health Assessment Framework that it published in 2015.

The answer to question 1 is therefore as follows: Recent decades have seen much new published scientific research on, and increased attention in society to, fish welfare. The council believes that this additional knowledge and information, increasing social concern and technological developments constitute good reason to update the policy position regarding fish welfare. Fish welfare and integrity are aspects that are still considered too little in the treatment of fish, although there are many positive initiatives underway.

In response to question 2, the Council believes that greater attention to the welfare of fish is required in all categories. Respect for intrinsic value requires ongoing and thorough consideration of the fact that human actions involving animals have an impact on these animals, thereby conferring a moral responsibility onto humans.



Photo: Sportvisserij Nederland

An angler, taking the fish off the hook



Photo: RDA

Boxes with packaged ornamental fish ready for shipping

The first step for the government is therefore to draw up a fish welfare policy. The available policy instruments can be deployed to promote innovative good practices. The Council believes the best option is a tailored approach, where policy is implemented to improve fish welfare in collaboration with research, industry, professional practice and society. Professional practice in particular is essential in order to reach the fish welfare objectives. In this context, existing laws and regulations can sometimes stand in the way. Other impediments to fish welfare may include the following:

- the subservience of welfare to other considerations, such as the economy or ecology;
- the lack of information or its distribution;
- the lack of technologies and methods available for application in practice; and
- the relative lack of attention to fish welfare in the market and society.

When taking steps, it is important to take heed of the existing barriers in the relevant sectors. Interests vary between categories. The figure below lists both general and species-specific starting points for addressing the welfare of fish. These are intended as an initial means of support; in practice, a tailored approach will be necessary to fill in the details. It is up to individual parties to implement measures to improve the welfare of the fish in question.

Conclusions and recommendations:

- The realisation that fish are sentient beings and acting accordingly must be more strongly emphasised in the catching, keeping and purchasing of fish.
- Fish welfare is a broad field with a significant degree of variation.

General recommendations for all fish	Expand, extend and enhance all current developments pertaining to fish welfare, and encourage, support and provide opportunities for new developments.
	Facilitate information provision and knowledge exchange (central coordination, between individual parties, tailored to audience, evaluation of effectiveness).
	Enable research and innovation (generation of theoretical and practical knowledge), e.g. welfare as an assessment criterion, for all categories of fish in society.
	Raise awareness throughout the chain (all direct links, from policy to practice, from research to society).
	Create market supply and demand for welfare-friendly fish and fish products.



Category-specific recommendations	Selective fishing, welfare-friendly fishing using current or new techniques, stunning/slaughter methods, shorter time between catching and slaughter, quality marks that include fish welfare, national and international collaboration.	welfarefriendly fishing, quality marks that include fish welfare, shorter time between catching, stunning and slaughter, stunning before slaughter	Increasing fishing operators' knowledge and expertise, enforcement, and development of practical tools	Stockmanship and management, increasing species-specific knowledge, knowledge exchange, welfare as a quality-mark criterion	Improving accessibility to health care, greater attention to welfare during transport	Increasing knowledge about the impact of husbandry and care on the results of experiments	increasing species-specific knowledge, Increasing knowledge about the impact of husbandry and care on the results of experiments
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- The Council advises the government to do more to ensure acknowledgement of the intrinsic value of fish. Current knowledge allows for the inclusion of fish welfare as a pronounced element of policy, e.g. by including welfare as an integral component of new research projects (and their evaluation), broadening and accelerating current initiatives, promoting the generation and dissemination of knowledge, and identifying and eliminating the existing barriers in each sector.
- Dutch practice offers various initiatives capable of improving fish welfare either directly or indirectly. This is encouraging, and merits significant investments.
- The Council believes that, rather than by way of exception, welfare should be viewed as a standard consideration in decisions affecting fish.
- In view of the large numbers of fish being kept in the Netherlands, the Council advises wider availability of veterinary and zoological information in practice.

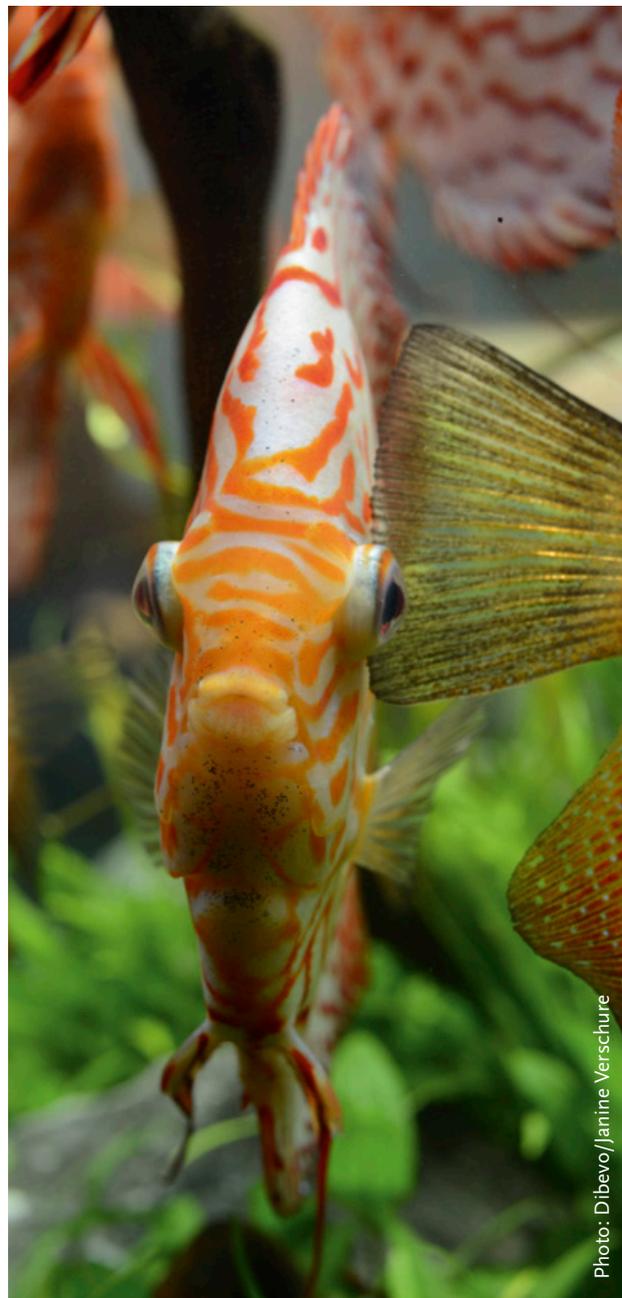


Photo: Dibevo/Janine Verschure

Appendix

This advisory report is a product of the full Council on Animal Affairs (RDA). It was prepared by a working group composed of RDA members dr. M.C.Th. (Martin) Scholten (chair), mr. A.G. (Andreas) Dijkhuis, J. Th. (Joost) de Jongh, ir. M. (Marijke) de Jong-Timmerman en dr. F.L.B. (Franck) Meijboom. Ir. M.H.W. (Marc) Schakenraad and dr.ir. M.A. van der Gaag acted as secretaries of the working group.

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More information about the Council on Animal Affairs can be found on our website (www.RDA.nl, english.rda.nl), where you can also download all previous advisory reports.



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