

Application for an Approved Wildlife Trade Operation

Outline

This is an application by Stephen McLeod of Oceanreef Aquaculture. To obtain the necessary approval to become an approved Wildlife trade operation in accordance with 303FN

My application is to facilitate the export of captive raised animals, which I do under state based permits.

I have annual permits for obtaining up to Weedy Sea dragons (*Phyllopteryx taeniolatus*) per year from Victorian state waters and have approval for the aquaculture of said animals.

No sea dragons caught from the wild in Victoria are allowed to be sent overseas. These are usually retained as brood stock

Off spring of the above are then raised to on sell overseas to public aquariums or other facilities that met the criteria of being able to look after the animals

No animals are exported for the purpose of food or traditional medicine trades.

Steve McLeod
11 Feb 2015

Who will do species harvest

The only person authorized to take the Weedy Sea dragons from the wild is Stephen McLeod and this is done in accordance with guidelines laid down in the permits

I have authority to take four (4) animals.

Purpose of Operation

The aim of my breeding/raising the above animals, is to provide healthy young animals to the public aquarium and educational facilities of the world. They have the chance to obtain these animals from a source other than wild caught. Our animals are better suited to the captive environment and generally do a lot better in the short and long term.

With the taking of limited numbers of animals from the wild to maintain this program it is a good management tool. They are being taken with care and then kept by persons who have experience in maintaining them in good health

It is our intention to try and close the cycle if possible and we have set up some larger deeper systems in our premises to do this, so that this may occur in the future

We have a good working relationship with Public Aquariums here and seek out information from them when required on husbandry issues. We also use a vet who has had experience with these animals to advise us when required on health and other issues

From our experience the transportation of smaller captive raised animals is a lot more successful than the export of wild caught larger animals. A lot of facilities in the past have worked on a 2 for 1 policy.

i.e.. order 2 animals for the getting of 1 display animal.

We are in a fortunate position by virtue of location and the great interest I have in these animals to be able offer them to the public aquarium arena and feel that these animals are a lot more suited to the captive environment than wild caught animals whether they are obtained legally or not

Any adult animals that are not required for future breeding are offered to Australian public aquarium facilities at no cost as they cannot be released to the wild

Collection and Management

The only animals that are taken from the wild in Victoria are the Weedy Sea Dragons. These are collected by me at sites on the Mornington Peninsula usually Flinders where there is a good healthy dragon population. With up to 50 animals being seen on dives, over a period of a few days

We will take animals from Nov to Jan of the following year as we can only collect in time frames allowed on our permits

The method of collection is by hand and has zero impact on the surrounding environment

Given the good population of this area I think we have very minimal impact on the total numbers for this animal.

In that for the taking of 4 animals we can provide up to 100 or more animals for the public aquarium market and significantly reduce any demand that there maybe for the taking of animals from the wild or illegally.

Systems and Housing

All the animals that are taken are housed at a factory which is dedicated as a fish holding Facility. For both my aquaculture and commercial taking of Marine Aquarium fish for export or local market.

With tank sizes ranging from 100 litres thru to 20,000 litres for the holding of specimens we supply for the domestic and international public aquarium market

The animals are housed in a temperature controlled system with appropriate cooling etc to provide them with a comfortable environment even on extreme weather days.

We use closed systems incorporating biological filtration with Ultra Violet and Protein Skimming

Tanks are cleaned daily and fresh sea water is sourced locally, with up to 13000 litres water being stored onsite.

I have had some quotes done for 2 metre deep tanks to be made these will be used to house brood stock .As one of the things that seems to be missing in closing the cycle is giving the dragons enough depth to be able carry out mating and the egg transfer.

Given that there is not a huge amount of evidence out there in regards to husbandry and the breeding of these animals, we are having to make our own observations and opinions on a lot of what goes on. But I freely share this information with others in the hope that we can close the cycle.

Long Term Management

Given that each year I think we get a little closer to closing the cycle and with the taking of minimal animals from the wild, we have no long term detriment on the wild populations of this animal whilst providing something very unique and particularly Australian to the world

And that current management practices for this animal are very well done and adequate to ensure that all areas are catered for. As well as long term management in providing animals for the captive environment it significantly reduces the pressure on wild caught on stocks as there is a better more suitable animal available to fill the need.

Compliance

We comply with all our relevant state permits with the filling in of monthly returns and annual reports regarding our operation, and we have passed any random inspections by Fisheries Officers that have been made to check on compliance

Reports

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All reports will be made as required but as this is an initial application there is no reporting history as such.

Background Information

I have been operating Oceanreef Aquaculture for a period of over 10 years and in that time we have been involved in collection and breeding of animals in Victoria and Queensland. Also assisting in operations in South Australia.

In the past we had a WTO for the Weedy Sea Dragon, as we are applying for now. We secured state permits for the taking of brood stock animals again in late 2015 early 2016 so seek to get a permit for export of offspring from these operations.

I have always held a great interest in sea dragons and their breeding but had quite a break due mainly to personal circumstances. But with state permits have started operations again in recent months. In the years I was not doing this type of operation, I was still involved within the industry working for a company sourcing animals for public aquariums and other allied operations.

I am using my knowledge of the animal and experience gained to captive raise animals and in this last season have been quite successful with over 200 animals raised from 3 animals taken. We also took 1 (One) female animal as to give us some viable brood stock for later this year.

We will also retain 2-3 animals from our current stock for breeding using animals from different broods to ensure genetic diversity.

It is also my intention to approach with applications to take a Gravid Leafy Sea Dragon from state waters. As I believe that the total non-take policy is actually detrimental to wild populations given the high prices these animals and Weedy sea dragons command on the market. I feel that it would be more than a little tempting for persons to take these animals illegally to supply demand, whereas the taking of 1 animal will allow the supply of most of the world's need for Leafies and the taking of 4 or so animals meets need for Weedies and provides an income stream to invest back into the closure of the cycle.

I have by far the biggest investment of any individual and probably public facility towards these animals with close to 50,000 litre total water capacity. With associated equipment to keep animals in an environment conducive to their well-being.

