



### Introduction

- Introduce yourself and let the students know what Fishcare does.
- Fishcare see there is a need for more information on the aquatic pest species that live in our waterways as well as ones that would love to come and live here.
- Introduce the booklet that address the aquatic pests in East Gippsland/Victoria



### Delivery of the book

Introduce “**Bazza the Bream**” who has written this booklet

**Page 5 –Introduction** - Australia is an isolated island and has lots of different types of native fish and mammals lived in the streams and rivers of East Gippsland

- **Native means animals that belong to Australia**
- **Indigenous means native animals that live in this region**
- 

Show the students the map of where we live, so much bush and that we have some beautiful rivers and Lakes, including the Tambo, Nicholson, Mitchell, Snowy Rivers. Lakes include Lake Tyers and the Gippsland Lakes. Lots of places for native fish, mammals, birds to live and have plenty of food, shelter and everything they needed. **Ask the students where they live.**

### Page 6 – Meet the locals

Lots of different fish live in our region and we are going to meet them.

### Page 7 – Australian Grayling

Graylings do not live very long and protected as not many left. Protected means that we forbidden by law to harm or destroy this animal. Graylings live up in the streams and travel down from the smaller streams into the rivers where they lay their eggs. Their eggs hatch and the baby larvae get washed out to sea but months later some of the baby fingerlings travel back into the rivers. You can do the maze and see how many different obstacles are along their way when travelling down from the rivers.

**Page 8 – Aussie the Bass, Trevor the Tupong, Gus the Galaxias, Bruce the river Blackfish, Pat, the Southern Pygmy Perch.**

**Introduce these fish - All these fish live in fresh water and how many did you know?**

## **Page 10 – Bazza the bream, Evie the Estuary Perch,**

**Introduce these fish** - **All these fish live in the estuaries.** The Estuary is a partly closed body of water along the coast where fresh comes from the rivers and mixes' with salt from the ocean.

## **Page 11- Des the Dusky Flathead, Sally, the Silver Trevally, Mal the Mullet, Annie the Australian Salmon**

**Introduce these fish** – **All these fish live in the salt water.**

**Bazza's puzzle** – **to be filled out when the students**

**Page 13 – The people invasion** – Before people came to this part of the world, things were peaceful but when the settler's came, they cut down the trees for houses and farming, the logs that were in the fishes homes were removed to let boats travel up the waterways and they planted trees that did not belong here and loved going fishing but there were no rules so keep on fishing, catching lots of fish including all the big fish that were the breeders.

**Page 15 – The Exotic Pest Invasion** – The people invasion was hard for us but there was another invasion to come – new pest fish starting to turn up in our waters – **they are called exotic or induced fish as they do not belong here**

## **Page 16 – What are exotic pests and why they are so bad for the local native fish**

- Exotic fish were brought by people, they can breed from any early age, grow much quicker than native fish, some have live babies, they can survive in poor water, are aggressive by nature, eat our eggs, eat all our food, take over our homes, carry diseases and give them to us.

**Page 17 – European Carp** – lots of these fish live in our rivers, super aggressive, make the water muddy and destroy vegetation that were our babies homes, **listed as noxious means they cannot be returned back to the water if caught.**

**Eastern Gambusia** – **also called Mosquito fish** as brought here from another country to control the mosquito larvae in the water. But there were better things to do as so much other food around. These small fish have had a major impact on the small native fish as they nipped their fins and tails that leads to infection and death. Eastern Gambusia are tough and can gulp air for the surface when there is limited dissolved oxygen in the water. They have live babies instated of eggs, so more of them eating all the food and take over homes before the native fish can. **Also listed as Noxious and not to be returned back to the water.**

**Page 18 – Goldfish** – People love buying goldfish as they are pretty and tough but after people get sick of them and they dump them into the waterways. Goldfish are a cousin to Carp and are much happier and thrive in our waterways rather than being stuck in a fish tank.

**European Green Shore Crab** – not a fish but this crab comes from another country and now has taken over where our native crabs used to live – **also listed as noxious which means you cannot return back into the water if you catch them,**

**Page 19 – Pick the pest activity – hint - most pest fish only have one single dorsal fin**

**Page 20 – Potential exotic pest fish – definition – an animal that do not live here at the moment but would love to if they could.**

**Redfin** - live in other parts of Victoria and they like to eat the eggs of native fish which is not good for native fish species. Also known to carry diseases that can kill some of our smaller native fish.

**Northern Pacific Seastar** --- Already been found in Gippsland Lakes now and please look out for these and let someone know if you see one – If you find one **report it to the agencies listed on the inside of the back cover in the Recreational Fishing Guide**. These Seastars can breed quickly and can have 15 million eggs a year and love to eat our shellfish.

**Page 21 – Cichlids – (sicklids)** – people love to have these in their aquariums as they have different types in beautiful brilliant colours – they are super aggressive and will take over if escape into our waterways.

**Oriental Weather loach** – strange looking fish and already live in different parts of Victoria. These pest can lay over thousands eggs at one time and love to eat native fish eggs. They can burrow in the mud and make the water dirty and uproot all the native plants.

**We do not want these fish in the waterways of east Gippsland and also listed as noxious and should never be released back into the water alive.**

**The big question – how do pest fish get into our waterways** and make life hard for the native fish that have always live here and some native fish have disappeared forever as a result.

**European carp** were brought to here in Gippsland and farmed in ponds and were sold them for people to eat. Fisheries closed the operation down but it was too late as carp had already been released into local rivers and floods also helped them spread.

Many people came from other countries to settle here and fish from the same countries where also brought here to make settlers have the fish to catch like they did at home. Trout were brought from other countries for that reason and are good eating but also preyed on the small native fish and these days, trout are only put into selected waters to give the smaller native fish a chance.

**Page 24 -Unwanted Aquarium fish -- this is important.** People love to buy aquarium fish and have them in bowls in their homes to look at. Sometimes the children get sick of feeding them and keeping their bowl clean and mums or dads do not want to kill them and so let them go into the local waterways where **they do NOT BELONG**. There are lots of aquarium fish that would love to live in the wild than swim in a fish bowl but in the wild, **they would take over from the native fish, eat their babies, take over their homes, eat all the food.**

**Page 25 - Controlling other pests** – Some people seem to think that it is a good idea to bring a animal from another country to control **a ANOTHER PEST – RABBITS, FOXES, CANE TOADS.**

**The Eastern Gambusia** ( Mosquito fish) was brought to Australia to eat all the mosquito larvae in the water and this was such a bad idea as there was so much other food to eat and did not stop the mosquitoes. These fish are aggressive and quickly had an impact on the native fish as bred very quickly as have **live young instead of eggs** and **nip the fins and tails of the small native fish that lead to infection and death.**

**Bait release-** Fishing is popular and using live crabs and small fish as bait is popular. These crabs may been caught in one waterway where they belonged but as people can move from one place to another and after a day's fishing, they might release their live bait to a waterway where they do not belong. This is how it is thought European Shore Crabs were brought to East Gippsland. **Always release live bait from where you first caught them from.**

**Page 26 – Native Fish versus Native fish** – Even native fish have their own places to live. Some native fish live in the Murray River, some native fish live in the Goulburn River, which are in other part so the state. They have their own space and have lots of food but problems happen when people think it is a good idea to bring one native from one area and put it into another waterway, where they are other native fish. As a result, there are too many native fish, all looking for the same food, shelter and space and the native fish that originally lived there may disappear.

**Hitchhiked from other places** – Big boats travel the world and stop at the Ports of other countries to deliver goods. When they come into ports, the boats will discharged ballast water that they have had in their hulls to keep the big boats stable when out at sea.

This ballast water has come from another country and will they discharge it, very small aquatic species that were in the ballast water also get discharged and quickly become pests in the waterways of their new country. **99 different aquatic pests have hitchhiked like**

this to Port Phillip Bay and this is how the Northern Pacific Seastar ended up in Victoria and is now spreading to other waterways and were found in the Gippsland Lakes last year.

**Hitchhiked on boats and equipment** - People love fishing and can go to different places around the country using their boats to go fishing. **Many pest species get a free ride on boats and equipment when people have been fishing in one place and then go to another place. Find the pest.**

## **Chapter 5 – How you can help?**

**Important section and go through each picture and discuss with the students what they can do to help get rid of the aquatic pest species in Each Gippsland.**

**Get your parents involved and we need everyone's help**

**"You and your parents can make a difference and just by reading this resource book, you have made the first positive step forward.**



