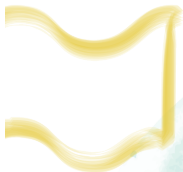




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First of all...

## **WHAT IS AN INVASIVE SPECIES?**

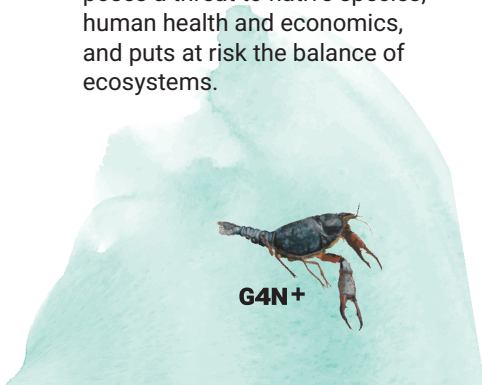


RED SWAMP CRAYFISH



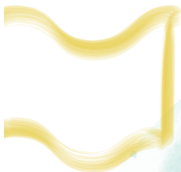


It is a species:  
introduced - a species  
transported from its native  
range to a new environment in  
which it has never been present;  
  
that proliferates without control;  
  
poses a threat to native species,  
human health and economics,  
and puts at risk the balance of  
ecosystems.





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Did you know that...

**THE RED SWAMP CRAY-  
FISH IS AN INVASIVE  
SPECIES?**



RED SWAMP CRAYFISH





The red-clawed crayfish  
*Procambarus clarkii*, is a  
crustacean native to North  
America.

In the Portuguese case, the  
species was transported to the  
Iberian Peninsula in 1973 by  
businessmen from the Badajoz  
area to be raised for food.

The crayfish fled the culture  
conditions and moved to the Caia  
River, a tributary of the Guadiana,  
where they were first seen in  
1979.





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Did you know that...

**THE RED SWAMP CRAY-  
FISH IS AN INVASIVE  
SPECIES IN FERVENÇA  
RIVER?**



RED SWAMP CRAYFISH





At this time the red-clawed crayfish *Procambarus clarkii* has spread throughout the watersheds of all Portuguese rivers including the Fervença in Bragança town.

Currently there is a large number of individuals along the entire course of the river.





RED SWAMP CRAYFISH





The Red Swamp Crayfish occupies a great variety of habitats, it has a short lifecycle with rapid growth and a high fertility rate.

Highly tolerant to diseases and harsh environmental conditions (humid conditions, it can live in polluted waters with low oxygen levels and extreme temperatures)



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**G4N+**



But...

**WHAT IS THE  
CLASSIFICATION OF THE  
RED SWAMP CRAYFISH?**

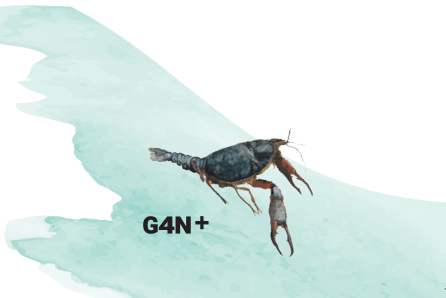


RED SWAMP CRAYFISH





Domain: Animalia  
Kingdom: Arthropoda  
Phylum: Crustacea  
Classe: Decapoda  
Family: Cambaridae  
Genus: Procambarus  
Species: Procambarus clarkii  
Name: Red swamp crayfish,  
Louisiana crayfish or mudbug





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But...

**WHAT IS ITS HABITAT  
LIKE?**



RED SWAMP CRAYFISH





It inhabits a variety of aquatic environments:

lakes;

rivers;

transition areas that suffer periodic flooding.

It also occurs in agricultural areas:

irrigation canals;

water reservoirs.



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After all...

# **WHAT ARE THE FEEDING HABITS OF THE RED SWAMP CRAYFISH?**



RED SWAMP CRAYFISH





It's an opportunist, aggressive species that can feed on several:

- Algae and plants;
- Various debris;
- Macroinvertebrates;
- Crustaceans;
- Fish;
- Eggs, larva and amphibian adults.





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But...

# **DOES THE RED SWAMP CRAYFISH HAVE PREDATORS?**



RED SWAMP CRAYFISH





The red swamp crayfish can be food for:

*Rattus* sp. (Giant rat);  
*Mustela vulgaris* (Weasel).  
*Ardea cinera* (Grey heron);  
*Egretta garzetta* (Little egret);  
*Esox lucius* (Northern pike);  
*Stizostedion lucioperca* (Zander)  
*Perca fluviatilis* (European perch);  
*Micropterus salmoides*  
(Largemouth bass).



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**G4N+**



But...

**WHAT IS THE COLOUR OF  
THE RED SWAMP  
CRAYFISH?**



RED SWAMP CRAYFISH





They usually have a red or brownish colour.

Its red colour is given by astaxantine.  
This pigment is also essential to its growth and survival.



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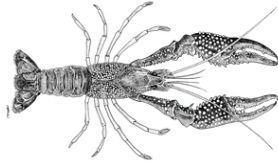
Did you know that...

**THE RED SWAMP  
CRAYFISH IS A  
CRUSTACEAN?**



RED SWAMP CRAYFISH





- body divided into cephalothorax and abdomen;
- symmetrical and highly developed claws;
- four pairs of walking legs;
- long and flexible antennae;
- breathing through gills;
- exoskeleton of calcium salts and chitin.

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**G4N+**



But...

**WHAT SIZE CAN THE RED  
SWAMP CRAYFISH BE?**



RED SWAMP CRAYFISH





The red swamp crayfish can reach up to 15 centimeters in length.

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G4N+



Did you know ...

**THAT THE RED SWAMP  
CRAYFISH MALES ARE  
DIFFERENT FROM THE  
FEMALES?**

RED SWAMP CRAYFISH





The distinction can be made based on the tweezers, which are more prominent on males.

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TRUE or FALSE

**CAN THE RED SWAMP  
CRAYFISH COEXIST WITH  
THE EUROPEAN  
FRESHWATER CRAYFISH?**



RED SWAMP CRAYFISH





No, once established the populations of the invasive species cause the regression and even extinction of many native communities, such as the crayfish *Austropotamobius pallipes*.

The native species is eliminated by interspecific competition and transmission of the disease originating from the fungus *Aphanomyces astaci* against which it has no defenses.



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**G4N+**



TRUE or FALSE

**THE RED SWAMP  
CRAYFISH CAN BE EATEN  
BY HUMANS.**



RED SWAMP CRAYFISH

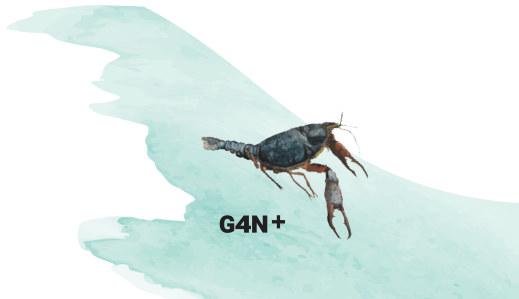




Like other crustaceans, only a small portion of a crayfish's body is edible.

Both tail and claw can be eaten, in most prepared dishes, such as soups, snacks, and pâtés.

The head can be used for seasoning or flavoring sauces.





G4N+



TRUE or FALSE

**THE RED SWAMP  
CRAYFISH ONLY HAS A  
NEGATIVE IMPACT ON  
THE MAN ECOSYSTEM**



RED SWAMP CRAYFISH





Besides many negative aspects,  
the red swamp crayfish also  
brings some benefits:

On its natural habitat it controls  
the growth of some species;

It is an economic resource in  
some regions. It can be used  
for cooking or for sport fishing.



**G4N+**





RED SWAMP CRAYFISH





Due to its ability to adapt to new environments quickly, this species rapidly grew in a great diversity of geological areas.

The control of the dissemination of the crayfish with the removal of the captured crustacean is essential for the ecosystem balance.



**G4N+**





RED SWAMP CRAYFISH





Some of the control measures you can get involved in along with local authorities:

- Raising community awareness;
- Capture actions: manual or using traps and nets;
- Construction of physical or electrical barriers;
- Biological control methods that include the use of predators, namely the otter.



**G4N+**





**G4N+**



Be active

**HELPS CONTROL THE  
SPREAD OF RED SWAMP  
CRAYFISH**



RED SWAMP CRAYFISH





## Other control measures :

Register the occurrence of the  
species in the EASIN  
application - European Alien  
Species Information Network;

Contact SPENA/GNR or ICNF;

