

Nature Notes

Junior Ranger

WATERBORNE INVADERS

In late 2004, Darwin River had a big scare. One of Australia's worst weeds, *Cabomba caroliniana* was found just down stream from the massive Darwin River Dam (Darwin's major source of drinking water). If this weed becomes established in Top End waterways, it will have enormous environmental and economic impacts!



AN UNWANTED VISITOR

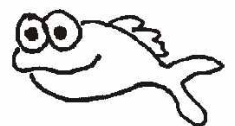
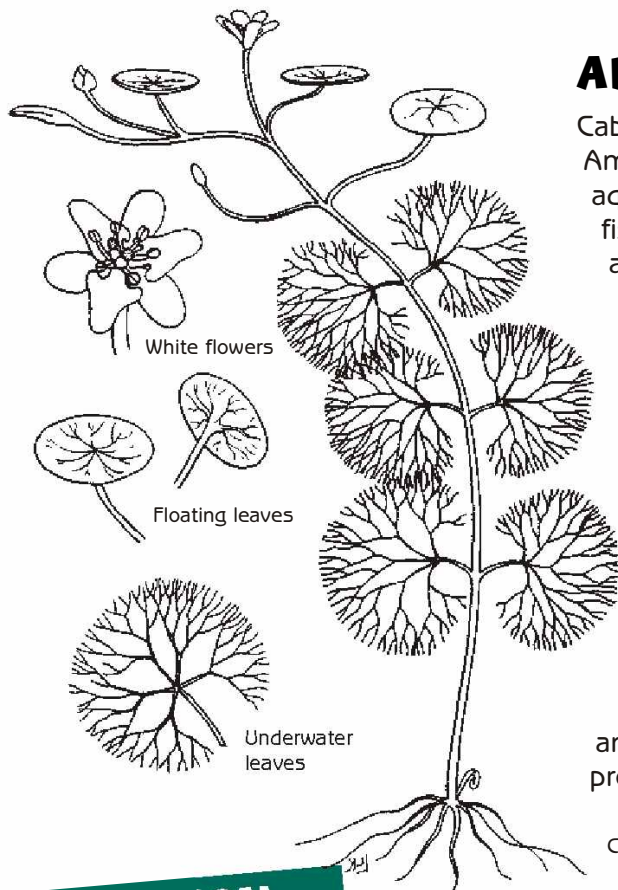
Cabomba, or fanwort is an aquatic plant that comes from South America. It was brought into Australia in the 1960's for the aquarium trade. That is, people wanted to buy and sell it for use in fish tanks and garden ponds. Unfortunately the plant has become an established weed in many parts of Australia and the world.

THIS IS ONE NASTY PLANT!

Cabomba grows almost completely underwater. Only the flowers poke up above the surface and the floating leaves are almost never seen in Australia. It can grow up to 5 centimetres (cm) a day, and a piece as small as 1 cm can re-sprout. This allows it to rapidly take over rivers and lakes, and even if you try to remove it, the smallest remaining piece can re-infest the area.

Not only does it choke out native plants and animals, it also gives drinking water a foul smell and taste. If it gets into Darwin River Dam, it has been estimated that the cost of weed control and water treatment will be \$40 million, and a new Dam will probably have to be built!

Cabomba caroliniana



DID YOU KNOW?

Cabomba was discovered in Marlow Lagoon, Palmerston (on the outskirts of Darwin) in 1996. It took 6 years and \$400,000 to finally eradicate it. And this was in a small, closed lagoon, not much bigger than a football field!

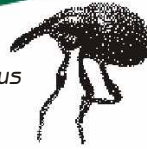
UNWANTED HELP

Unfortunately, over the years Cabomba has received plenty of help to spread. It is still a popular aquarium plant (although now illegal in most of Australia), and many people have accidentally released it when releasing fish into the wild, or when cleaning out their tanks. Unbelievably, some people have even deliberately spread it to the wild so that they always have a fresh supply to either sell or use for themselves!

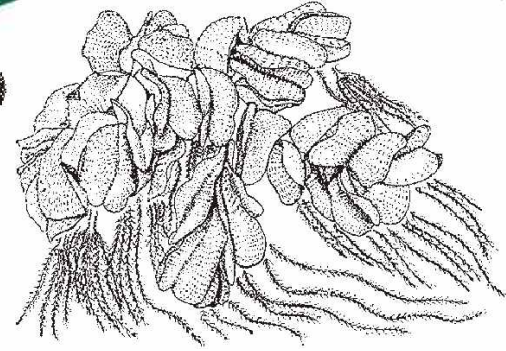
NOT ANOTHER ONE!

Salvinia molesta is another aquatic invader from South America that has become established in Australia. It too was used and sold widely as an aquarium plant. It floats on the surface but it grows just as quickly and causes the same sorts of problems as Cabomba. Like Cabomba, it is illegal to keep it in the Territory, even in your own fish tank or pond.

However scientists have discovered a weed busting friend in the fight against Salvinia. It's a tiny (up to 2mm long) black bug with a big appetite and its scientific name is *Cyrtobagous salviniae*. It can destroy huge infestations of Salvinia in about 2 months. This is what scientists call a biological control.



Cyrtobagous salviniae



Salvinia molesta

WANTED! DEAD OR ALIVE (BUT PREFERABLY DEAD!)

If you think you may have Cabomba or Salvinia in your fish tank or pond, or you know someone who is selling it, call your local Weed Branch officers for advice on how to safely dispose of it.

DARWIN 8999 2020
 KATHERINE & THE GULF 8973 8107
 ALICE SPRINGS 8951 9210
 TENNANT CREEK & BARKLY 8962 4491
 Or call the CABOMBA HOTLINE ON 8999 8954

WAR OF WORDS

Can you find these 'waterborne invader' words in the puzzle? They go in all directions, even backwards! Starting from the top, take the first 6 letters that are left over and place them in the spaces below the puzzle. This will reveal what kind of bug *Cyrtobagous salviniae*, the Salvinia busting bug is.

- | | |
|-------------|------------|
| AQUARIUM | INVADER |
| AQUATIC | LAGOON |
| BIOLOGICAL | LAKE |
| BUG | POND |
| CABOMBA | RIVER |
| CONTROL | SALVINIA |
| COST | SMELL |
| DAM | TASTE |
| FISH | UNDERWATER |
| FOUL | WATER |
| GROW | WEED |
| ILLEGAL | |
| IMPACT | |
| INFESTATION | |

S L U O F R E T A W R B
 M L A K E D E E W T I I
 E G R O W W M D S E V O
 L O R T N O C O A E E L
 L V I M P A C T P V R O
 I N F E S T A T I O N G
 U N D E R W A T E R B I
 M U I R A U Q A A H U C
 A I N I V L A S D S G A
 A Q U A T I C I A I T L
 A B M O B A C L M F G E
 I L L E G A L A G O O N



Want to learn more about Cabomba?
 Check out the website www.cabomba.nt.gov.au