

Exercise 3

Read the article about a plant called a water hyacinth, and then complete the notes.

Water hyacinths

Water hyacinths are water plants which have large shiny green leaves and purple flowers, and live in water. The leaves and flowers are visible on the surface with long roots growing down into the water.



Although originally from South America, water hyacinths are now found on every continent on Earth, with the exception of Antarctica. They are described as highly 'invasive', which means that they can damage the environment of a particular area where they are found.

In the right conditions, water hyacinths can grow up to five metres a day, and as a result, they can quickly prevent sunlight from reaching other plants growing on the bottom of a pond or a lake. These plants growing deeper underwater provide places for fish to lay their eggs, so the lack of sunlight can mean that fish breeding cycles can often be disrupted in those areas of water. Water hyacinths therefore need to be controlled. This is not simple. Of course, any potential solution very much depends on the size of the area the water hyacinths are covering. If this is a small pond, the advice given is to empty the pond water away. Once this has been done, it is essential to chop the plants into tiny pieces so that new water hyacinths are unable to grow.

In a large lake, this is not practical. In places like Lake Victoria in Africa, which has suffered greatly from the growth of water hyacinths, alternative solutions are required. One idea has been to introduce insects which eat the plants. Although this has had some success, the spread of the water hyacinths in the lake has been so extensive that at times it even stops fishing boats from moving. As fishing is a major industry on the lake, this is very serious. In addition to other measures, therefore, the decision to add chemicals to the water to destroy the plants has sometimes been taken. These must obviously be used under tight control as otherwise the intended solution could turn out to be as bad as the initial problem.

The effects of the water hyacinth plants can also be felt in the wider area. Water from lakes is taken through pipes to surrounding farmland. However, the spread of these plants can block the water pipes. This means that less water is available for use on farmland. So while water hyacinths might look attractive – in fact, this is one of the reasons why they were originally brought to many other countries from South America in the first place – they are not something that people are generally pleased to see.

Looking to the future, water hyacinths may become useful. Researchers in Europe, Asia and Africa are investigating how water hyacinths can be used to produce biogas, a form of clean energy.

These projects are taking vital steps towards a cleaner environment, improved health and greater employment opportunities.

Imagine you are going to give a talk to your classmates about water hyacinths.

Use words from the article to help you write some notes.

Make short notes under each heading.

Question 8

Problems water hyacinths cause:

Example: can damage the environment

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- [4]

Question 9

Methods of controlling water hyacinths:

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- [3]

[Total: 7]