



GROWING & KNOWING **GRASSES**

WRITTEN BY JOHN MASON AND STAFF OF ACS DISTANCE EDUCATION

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CREDITS

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CHAPTER 1 SCOPE AND NATURE OF GRASSES



Wheat crop

THE ROLE OF GRASS IN THE ENVIRONMENT

Grasses are perhaps the most important plant family of all to mankind. They provide us with important cereal crops, food for grazing animals, playing surfaces for most of our sports fields, fresh and dried cut flowers, culinary and perfumery herbs, and are extremely important for building and other construction (i.e. bamboos), particularly across the tropics.

Grasses also contribute to the environment in positive ways, they are quite resilient and need less water than most people presume; most grass species are tough and even un-watered grass will bounce back after dry and hot weather. Here are some ways grasses help the environment:

1. Grass is very efficient at absorbing green-house gas (carbon dioxide) and converting it to oxygen, in fact more efficient than many other species of plants – this is because turf is leaf dense and a fast consistent grower. Grasses also purify the air by absorbing pollutants such as ozone and sulphur dioxide.
2. Grasses are also nature's way to purify water – for example wetlands are constructed and used as collection points for run-off. Water run-off (especially in urban areas) is often polluted with a range of contaminants; wetland grasses filter and bio-degrade contaminants through their root systems.

3. Turf/lawn grass also has a cooling effect on the surface temperature just above it – it is far cooler than hard surfaces such as paving or asphalt or concrete for example and does not transmit heat back into the atmosphere like hard surfaces do. It is also cooler than bare soil, and a house surrounded by grass is cooler than one surrounded by hard surfaces.
4. Animals, birds and insects use grassed areas for forage and protection in urban settings.

WHAT IS GRASS?

‘True’ grasses belong to the family Poaceae (syn. Gramineae). Other plants such as reeds and rushes and many other strappy leafed plants may occasionally be called “grasses” by

non-technical people, but they are not really grasses.

Grasses are one of the largest families of flowering plants. They range in size from tiny creeping or clumping species through to magnificent tropical bamboos. There are many other different features:

- Various foliage colours: red, blue, green and even gold tones
- Thick and thin leaves
- Upright and drooping foliage
- Tall and low flower spikes
- Different coloured flowers
- Some are invasive - some are not
- Some grow in very wet soil - some in drier soil



