Water Hyacinth

Eichornnia Crassipes

Origin: Introduced from South America as an ornamental pond plant

Main features: Perennial, mat-forming aquatic plant; free–floating, but anchored in shallow water

Leaves: Inflated bladder-like leaf stalk with a thick, round, waxy, dark green leaf

Flowers: Showy 6-lobed pale violet or blue flowers in clusters of 8 to 10. Upper flower petal has prominent dark blue and yellow patch

Fruit: Capsule with seeds

Reproduction: Seeds and vegetatively. The world's most damaging aquatic weed and one of the fastest growing plants known – can double in two weeks

Water Affairs
Agriculture, Forestry and Fisheries
Environmental Affairs

WORKING FOR WATER

EXPANDED PUBLIC WORKS PROGRAMME
CONTRIBUTING TO A NATION AT WORK

HOW DO AQUATIC WEEDS AFFECT YOU?

• Biodiversity - Indigenous plant and animal life is reduced

• Water availability – High evapotranspiration rates lower the water level; mass invasion hampers access to water by rural communities and their livestock

• Water quality – Oxygen levels and turbidity are reduced

• Health – Aquatic weeds provide suitable breeding grounds for mosquitoes and bilharzia-carrying snails.

•Recreation - Recreational sports such as fishing, swimming, water-skiing and boating are hampered or prevented by the sheer masses of aquatic weeds

•Economy – Subsistence fishing is hampered; irrigation systems are blocked; the control and management of aquatic weeds are very costly

•Aesthetics -Infestations can ruin the aesthetic appeal of water-bodies

•It can cause drowning of humans and animals

Control Methods:

There are **4 options** available to control the spread of these aquatic weeds :

Chemical control – using environmentally safe herbicides

Mechanical control – the physical removal of weeds by hand-pulling or use of machines

Biological control – using species-specific insects and diseases from the alien plants country of origin

Integrated control – combinations of the above 3 approaches

Contact: 0800 005 376

Water Affairs
Agriculture, Forestry and Fisheries
Environmental Affairs

WORKING FOR WATER

EXPANDED PUBLIC WORKS PROGRAMME
CONTRIBUTING TO A NATION AT WORK

Water lettuce

Pistia stratiotes

Origin: Introduced from South America as an ornamental pond plant

Main features: Perennial, mat-forming aquatic plant; free –floating, except when stranded in the mud

Leaves: Spongy, pale yellow-green fan-shaped leaves grouped in rosette, with parallel veins. No leaf stalks

Flowers: Inconspicuous, pale green or white flowers

Fruit: Small green berry

Reproduction: Seeds and vegetatively; grows and spread very rapidly

Water Affairs
Agriculture, Forestry and Fisheries
Environmental Affairs

WORKING FOR WATER

EXPANDED PUBLIC WORKS PROGRAMME
CONTRIBUTING TO A NATION AT WORK

Hydrilla

Hydrilla verticillata

Origin: Introduced from Asia as an ornamental pond plant

Main features: Submerged rooted freshwater plant which is invisible until it "tops out" and sprawls across the water surface – profuse branching

Leaves: Leaf shapes vary from widely ovate to linear, 2-4mm wide & 6-20mm long; occur in whorls of 3-8; leaf margins are serrated

Flowers: Inconspicuous, about 3mm across; on long thin stalks; float on water surface

Reproduction: Four different ways - fragmentation, tubers, turions and seed; fragment with single whorl of leaves can sprout new plant

Water Affairs
Agriculture, Forestry and Fisheries
Environmental Affairs

WORKING FOR WATER

EXPANDED PUBLIC WORKS PROGRAMME
CONTRIBUTING TO A NATION AT WORK

Parrot's feather

Myriophyllum aquaticum

Origin: Introduced from South America as an ornamental pond plant

Main features: A rooted aquatic perennial with stems up to 3m long, emerging up to ½m above the water surface; forms a dense tangle of stems and roots.

Leaves: Unbranched pale green leaves are finely divided and arranged in whorls of 4-6; feathery appearance

Flowers: Inconspicuous solitary, cream flower in leaf axils.

Fruit: No seeds are produced

Reproduction: Parrot's feather is sterile – only female plants found in Southern Africa; reproduces from stem fragmentation

Water Affairs
Agriculture, Forestry and Fisheries
Environmental Affairs

WORKING FOR WATER

EXPANDED PUBLIC WORKS PROGRAMME
CONTRIBUTING TO A NATION AT WORK

Salvinia/Kariba weed

Salvinia molesta

Origin: Introduced from South America as an ornamental pond plant

Main features: Perennial, mat-forming, free-floating water fern with horizontal stems (rhizomes) 60 -250mm long

Leaves: Green to yellow green oval leaves may grow to about 60mm; tend to fold together; unwettable due to specialized leaf hairs that trap air bubbles; modified feathery, root-like leaves hang in water

Fruit and Flowers: No flowers or seeds are produced

Reproduction: Kariba weed is a sterile hybrid and reproduces only by fragmentation, regenerating from any fragment that includes a node; grows very rapidly and under favorable conditions may double in number within a week!

Water Affairs
Agriculture, Forestry and Fisheries
Environmental Affairs

WORKING FOR WATER

EXPANDED PUBLIC WORKS PROGRAMME
CONTRIBUTING TO A NATION AT WORK

Spiked water-milfoil

Myriophylllum spicatum

Origin: Introduced from North America, Europe, Asia and North Africa as an aquarium plant

Main features: A dense mat-forming, rooted aquatic plant with stems up to 3m long; usually completely submerged except for the leafless flowering shoots

Leaves: Unbranched olive-green leaves, finely divided and arranged in whorls of 4-6; feathery appearance

Flowers: Small creamy flowers arranged in whorls on emergent spikes 50-100mm long

Fruit: Small nutty fruits about 3mm in diameter

Reproduction: Reproduces from seed and fragmentation of the stems.

Water Affairs
Agriculture, Forestry and Fisheries
Environmental Affairs

WORKING FOR WATER

EXPANDED PUBLIC WORKS PROGRAMME
CONTRIBUTING TO A NATION AT WORK

ARE YOU GIVING THESE AQUATIC HITCH-HIKERS A LIFT?

People often inadvertently spread aquatic weeds. Fragments can snag on boats, trailers, water skis and fishing equipment, allowing transportation from one water- body to another. In damp conditions aquatic weeds can survive out of water for long periods. Spread can still occur even if you do not use your equipment regularly.

A small fragment is often enough to start a new infestation!

WHAT CAN YOU DO TO HELP PREVENT THE SPREAD OF AQUATIC WEEDS?

• FIRST, BE VIGILANT IN CLEANING YOUR BOAT BEFORE YOU LEAVE THE RAMP!
- Check boats, motors and trailers for tag-along weeds immediately on removal of equipment from the water.

• Remove all fragments of weed from nets and fishing tackle before you leave the area.

• Leave all fragments of aquatic weed where you found them, or dispose of them in the rubbish bin

• Check dogs, boots and boats for weed before you leave the area

• Do not allow drainage equipment, nets or boats into water bodies on your property unless they are free of weeds.

• Do not dispose of your aquarium contents into or near a water body

• Do not keep, buy or sell these aquatic weeds – it is against the law, as they are declared invasive alien plants

• Learn about the aquatic weeds in your area

• If you see an unusual aquatic plant, note the location, take a picture and contact the *Working for Water* Programme hotline as soon as possible

Acknowledgements:

Pictures: Debbie Sharp

Content: Debbie Sharp

Water Affairs
Agriculture, Forestry and Fisheries
Environmental Affairs

WORKING FOR WATER

EXPANDED PUBLIC WORKS PROGRAMME
CONTRIBUTING TO A NATION AT WORK