

Blue-green algae

Blooms of blue-green algae grow rapidly and appear like a suspension of greenish paint or curdled greenish milk on downwind water surfaces.

Ranging in colour from pale green to blue-green, dark green to brown, blue-green algal blooms often have a foul sewerage-type odour.

Harmful toxins produced by some species can kill large numbers of stock quickly with most deaths occurring during late summer and early autumn.

Toxicity can change rapidly and can increase as a bloom ages or starts to die. Some toxins can persist for more than three months before being degraded by sunlight and microbial activity.

Livestock deaths

As little as one cup or many litres of toxic water can cause death. Cattle, sheep and goats are susceptible and usually develop muscle tremors and start staggering within 30 minutes of drinking toxic water.

Affected stock lie down and die with convulsions within 24 hours. The few animals that survive the first 24 hours develop liver damage, jaundice and photosensitisation and could die 1-2 weeks later or become chronically ill from liver damage.

Medicinal activated charcoal or bentonite are the only treatments available and need to be administered by a veterinarian before symptoms develop. The treatment is expensive and is an option only for very valuable stock.

Sheep are more likely to be affected than cattle as they tend to drink from dam edges whereas cattle often wade out into the dam beyond the toxic area. Dogs that lick their coats after swimming in contaminated water can also be poisoned.

Monitor water

Check water sources daily for blooms and ensure stock and people are isolated from contaminated water if blue-green algae is suspected and have water samples tested.

Water toxicity can vary from hour to hour and day to day and water can be toxic to stock even after a bloom has disappeared. Do not allow stock access to affected water for at least 10 days after a bloom has disappeared.

Dogs that lick their coats after swimming in contaminated water can also be poisoned.

Wading bypasses algae: Cattle can be less susceptible to blue-green algae as they often wade into dams away from toxic blooms.

Treating algal blooms

Ferric alum can be used to treat algal blooms but is best used for prevention.

It restricts algal growth by removing phosphorus from the water. Apply 50 grams of ferric alum per 1000L of water by placing it in a porous bag attached to a float.

Algicides or herbicides are not recommended for algal control as they can make water more toxic. Decaying algal cells release even higher levels of toxins which can persist for many months.

Straw breaks up algae

Another preventative measure is spreading 100g of barley straw over 1000L of water (apply by mooring it in plastic mesh bags) – this breaks up algal rafts. It can take one month to start working but lasts for up to six months.

FOR MORE INFORMATION

www.agric.wa.gov.au/content/lwe/water/watq/fn044_2004.htm

www.agric.wa.gov.au/small_landholder then click on the 'Water' tab

Notes

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