Floodplain
GRAZING PROJECT

ESTABLISHING A WET PASTURE SYSTEM

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Did you know that there are swamps on the floodplain suitable for growing native wet pasture? Re-instating more natural drainage in these areas can improve water quality, reinstate habitat for birds and fish and provide ideal growing conditions for nutritious, native, wet pasture species such as water couch (Paspalum distichum), soft rush (Eleocharis sp) and mud grass (Pseudoraphis sp).

Every farm and every swamp is different and not all will be suitable. The following factors are important when deciding if your property could support a wet pasture system.

WHAT TYPE OF SWAMP DO YOU HAVE?

The preferred habitat for most native, wet pasture species is open, low-lying backswamps. These areas are predominantly fresh and, unless drained, contain shallow water for most of the year.

HOW WET DOES THE SWAMP HAVE TO BE?

Native, wet pasture species grow best in near-permanently wet, shallow ponded environments. They can survive short periods of dryness, but need to be kept moist or wet for most of the year.

HOW DOES WATER ENTER YOUR SWAMP?

It is important to identify how your swamp fills with water. Is it runoff from the local catchment? Does it only fill from local rainfall? Will you have to rely on fresh, high tides from the river?

IS THE WATER LIKELY TO BE SALTY?

Opening floodgates can allow water from the river to replenish floodplain wetlands. However, you need to know how salty the river is near your property.

Some wet pasture species can tolerate brackish or even salty environments. However using tidal water needs careful planning and management. In some cases salt water has caused agricultural and environmental damage in low lying areas.

HOW DEEP CAN WATER BE HELD ON THE SWAMP?

The depth of water will determine what native wet pasture species will grow. However water depth needs to be increased gradually during the transition from a predominantly dry pasture to an established native wet pasture.

HOW LONG CAN YOU HOLD WATER ON YOUR SWAMP?

The longer you can maintain wet, shallow ponded conditions, the healthier the wet pasture system will be. Ideally, swamps will be wet for months.

Knowing the permeability of the soil underlying your swamp is critical. Some floodplain soils drain relatively quickly, which can make holding surface water for any length of time difficult.

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WHEN DOES THE PASTURE NEED TO BE WET?

The majority of native, wet pasture species are summer growing plants. For maximum growth the swamps need to be kept wet in the spring and summer for maximum growth.

WHAT SPECIES ARE LIKELY TO GROW?

Not all swamps will necessarily grow the same pasture species. There are a number of ways of determining what species are likely to grow in a wet pasture.

Past pasture species

Identify what pasture species grew in the swamp before drainage. Older local residents may remember what the swamp was like before drainage. Historical parish maps can also provide useful information on pre-drainage conditions. If drainage is reduced and ideal growing conditions are created, past pasture species could return.

Existing seed bank

A seed bank is the store of dormant seeds in the soil underlying the swamp. Viable seed may still exist in the soil from pre-drainage conditions. Seed bank trials can be conducted to identify what species are likely to return given wetter conditions.

Nearby swamps

Many wet pasture species are spread by seed and plant fragments across the floodplain during floods. If nearby swamps contain your preferred wet pasture species, it is likely, given ideal growing conditions, they will colonise your swamp as well.

WHAT OTHER OPTIONS DO I HAVE?

Native wet pasture species will only grow naturally in certain areas. Remember that there are other pasture species better suited for grazing in drier and or higher areas of the floodplain. Sustainable pasture production is achieved by selecting species best suited to the growing conditions on your property.

WHAT DO YOUR NEIGHBOURS THINK?

It is very rare for one landowner to own an entire swamp. Reducing drainage conditions may require negotiation with all landowners along the drainage system.

BEFORE YOU MAKE ANY CHANGES TO DRAINAGE

Modifying a drainage system will usually require approval. Your local council will advise you on what approvals are required. Many drainage schemes are owned and maintained by Council or Private Drainage Boards, and activities such as excavation, re-designing drains and installing new structures require consent.

WHAT ASSISTANCE IS AVAILABLE?

A number of organisations can assist landowners make changes to their drainage systems.

Local councils and flood mitigation authorities can provide technical assistance and, in some instances, financial assistance. Councils can also assist with liaising with other landowners.

Other organisations that can provide technical advice or access to funding include NSW Department of Primary Industries, NSW Department of Environment and Climate Change, the Catchment Management Authority and non-government organisations such as WetlandCare Australia and Landcare.

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