

# MANAGEMENT STRATEGIES FOR RELOCATION & ACCLIMATISATION OF ANGUS BULLS

# INTO NORTHERN AUSTRALIA

With many bulls having been bred in more temperate areas, it is timely to reflect on several important recommendations for the successful relocation and acclimatisation of Angus bulls.

These recommendations are the result of a research study conducted by Angus Australia aimed at understanding the management requirements of Angus bulls in northern Australia, and involved interviews with 60 seedstock and commercial producers across Australia who were selling or purchasing Angus bulls into northern Australia.

# **Acclimatisation Requirements**

The length of time and management required for acclimatisation is ultimately determined by the variation in the climate and production environment between the bull's origin and the destination region and the time of year when re-location occurs. The biggest factor influencing successful acclimatisation is the management of bulls before and immediately after they reach their new environment.

Areas that require particular attention include the acclimatisation period post relocation, bull age, nutritional regime pre- and post-relocation, use of controlled joining periods, implementation of vaccination programs prior to re-location, external parasite control and disease management. All of these factors can affect how well bulls will perform in their new environment.

#### **Duration of acclimatisation**

Management of the acclimatisation of bulls to new environments will impact their subsequent mating performance and longevity. A minimum of 3 months acclimatisation is recommended when relocating Angus bulls into northern Australia. This is required to minimise any reductions in semen quality which may result from transportation and post relocation environmental stressors. Longer periods of acclimatisation will generally give better results.

#### Age of bulls when relocated

Generally, the younger a bull is when it is relocated the better it will ultimately become acclimatised to the new environment.

When purchasing bulls of different ages, the following general acclimatisation periods should be considered before putting them to work:

- A minimum of 3 months for 18 to 24 month old bulls
- A minimum of 6 months for 12 to 18 month old bulls
- Bulls 12 months and under will ultimately acclimatise better to the new environment, but should be allowed 6 to 12 months acclimatisation period If used within the first 12 months, bulls should only be given a very light load. A minimum joining percentage of 5% is recommended.

## Time of year at relocation

The climatic conditions that animals are exposed to vary substantially between environments. The main factors to consider when relocating animals include the variation in temperature, humidity and nutrition.

The cooler months are the best time to relocate bulls, with autumn usually providing the least variation in climatic conditions. Where possible animals should be relocated before the end of the northern wet season when pastures are generally still of reasonable quality and temperatures are beginning to drop.

If feed quality and availability after arrival is limited then bulls should be provided with some supplementation until they are placed into the breeding herd.

#### **Nutrition**

Bulls should be gradually transitioned onto their new diet post relocation to allow rumen micro-organisms time to adapt. A minimum of 14 days is recommended to allow bulls to adapt to pastures in the new environment, with some supplementary feeding offered where necessary. Post relocation supplements should consist of good quality hay and/or protein and energy supplements.

Where possible, it is best if bulls are provided with minimal grain supplement in their diets prior to relocation. Bulls that have received large amounts of grain supplementation prior to relocation should be let down on a protein and energy supplement for at least a 3 month acclimatisation period.

Bulls purchased from an auction will commonly have received supplementation or high quality forage presale. These bulls should be monitored carefully to ensure that their body condition doesn't drop too rapidly, and if it does, they should be moved quickly onto supplementary feeding.

In areas where shrubs and trees are an important part of the diet, bulls should be carefully managed while they acquire the necessary browsing skills for this process.

### Managing ticks

Producers in endemic tick areas should treat all Angus bulls on a regular basis. Due to their lower resistance when compared to their *Bos indicus* counterparts, Angus bulls have a potential to lose weight quickly and possibly die due to high tick burdens if not managed carefully.

Angus bulls should ideally be treated for ticks twice per year, both at the beginning and end of the wet season. This provides protection during their period of peak work, and uses the natural break in season to interrupt the life cycle of the ticks. Bulls that are removed during the dry season should be treated as required.

In situations where it is impractical to treat bulls for ticks, using Angus influenced composite or cross bred bulls with some *Bos indicus* content rather than pure bred Angus bulls is recommended.

# **Buffalo fly control**

Buffalo flies and mosquitoes affect production through irritation to the animal and as vectors for disease. One or more of the following control methods should be used to reduce these insect burdens:

- Buffalo fly traps
- Ear tags, which release small amounts of chemical over a long period of time
- Sprays and pour on chemicals
- · Back rubbers, containing an oil and insecticide mixture

#### **Vaccinations requirements**

All bulls should be vaccinated in accordance with standard protocols against the Clostridial diseases (5 in 1, or 7 in 1), Pestivirus and Vibriosis.

Additionally, bulls should be vaccinated for:

- Tick Fever: Producers purchasing bulls for relocation into the ticky areas of northern Australia should ensure that all bulls have been pre-vaccinated. The ideal time for bulls to be vaccinated for tick fever is between 6 to 12 months of age, with a second shot ideally prior to relocation or as soon as possible post-relocation. Bulls vaccinated when older than 9 months of age may react to the vaccine and should be monitored for signs of fever. Likewise, all bulls, including those that have been vaccinated, should be monitored for signs of tick fever for the first month after relocation. If bulls have not been vaccinated prior to relocation into a tick zone they should be vaccinated on arrival and treated with a tickicide that kills nymph ticks. This strategy is inferior to pre-vaccination and should be avoided if possible as bulls can become affected by tick fever prior to the vaccine taking affect.
- 3 Day Sickness (Bovine Ephemeral Fever): Bulls should be vaccinated prior to relocation to reduce the risk of contracting Bovine Ephemeral Fever.
- Botulism: Producers relocating bulls to areas endemic to Botulism should ensure bulls are vaccinated either before relocation or immediately on arrival.

#### **Transportation**

The transportation of bulls can have multiple negative effects on the animal if not managed appropriately. All livestock transportation should be conducted in accordance with the state and federal legislation. A maximum of 48 hours off water for cattle over 6 months of age is recommended, with additional considerations for animals after 36 hours off water.

The use of trucks with air bag suspension systems, and the addition of flooring covering such as rubber matting, wood shavings, rice hulls or carpet can assist in reducing the level of physical stress on animals during transportation.

#### Removal of bulls from the breeding herd

Management during the first 12 to 18 months after relocation will affect a bull's fertility and health for the duration of its working life. The removal of new bulls from the cow herd after the wet season and during the first winter post relocation is particularly important as the bulls will be still acclimatising to the environment.

Where possible bulls should be removed between musters and supplementary fed to increase their body condition. The type and amount of supplementation required will vary depending on the season and availability.

In situations where it is not practical to remove all bulls, and/or where sourcing supplementary feed is either difficult or too costly, an alternative approach may be to only remove bulls for supplementary feeding that are in poor condition.

## Mixing bulls

Injuries to younger bulls due to fighting with older herd bulls can cause losses. The success of younger bulls in their first breeding season can be substantially increased by only running bulls of similar ages together.

In cases where young bulls have been put into areas with high numbers of feral bulls their survivability can be negatively affected. It is recommended that feral bulls should be removed from the property. If feral bulls cannot be controlled, it is recommended that only well acclimatised bulls over 2 years of age should be used.

#### Mustering

During periods of extremely hot weather it may be preferable to minimise mustering of bulls.

If spear traps are in use then bulls will need to be inducted and trained to use this equipment prior to setting the traps.

