



# PROPERTY MANAGEMENT PLANNING

LYNCORANNE ANGUS/BRANGUS X

Lynton & Di Pratt

'Tumbeelluwa'

Theresa Creek, Mummulgum.

[www.lyncoranneangus.com.au](http://www.lyncoranneangus.com.au)

# "Tumbeelluwa" PROPERTY MAP

Area = approx. 1100 acres





# BEEF & FORESTRY PRODUCTION

Our property = 'Tumbeelluwa' (Aboriginal word meaning Evergreen)  
future development depended on readdressing our land management practices  
and our farms' production sustainability.

"What is our primary  
productive objective?"

To produce the highest quality  
beef and timber with minimal  
impact on the environment, by  
the adoption of 'Holistic',  
'AIMS' & 'SoilCare' and  
'Master Tree Grower'  
management practices.

"Is our property physically  
capable of sustaining our  
chosen production systems  
relative to our Property Plan  
expectations?"



Lyncoranne Angus cattle grazing on northern slopes,  
part of our hill pastures, private native forest and view of  
Cambridge Plateau in the background.

# PHYSICAL & ECONOMIC CONSIDERATIONS WHEN DEVELOPING A PROPERTY MANAGEMENT PLAN

A Property Plan is not a static blueprint, it should be regularly revisited for progress & change.

- First and foremost we conducted a SWOT Analysis (Strengths, Weakness, Opportunities, Threats). Consequently, we acknowledged the limitations & positives of our whole farm management practices and addressed our current and future requirements, then set out our goals and priorities to suit our production objectives.
- We then considered if we had sufficient finances/income and knowledge /education to carry out the design process relative to a successful Property Management Plan.
- Apart from our primary production objectives and goals, areas we regarded critical to the physical component of our holistic planning success are improved pasture and native vegetation management, stream and water conservation, native forest and biodiversity protection.
- With all of the above considerations in place, we critically inspected our farm's topography and its existing environmental and bio-diversity situation. We examined existing infrastructure designs and layouts, brainstormed, took photos and recorded ideas before designing and developing our physical plan and an Action Plan (calendar of operations) with the aid of computer software eg. 'Practical Systems – Farm/Map'.

# PLANNING ISSUES ADDRESSED

- **Financial:** Is the cost of property planning feasible and achievable within a given timeframe?
- **Knowledge:** Are our ideas/designs workable? Formal education, seminars, networking, workshops, internet etc.
- **Live=stock:** Production practices (rotational grazing, feeder program), mustering, stock=yard activities/health etc ,shade & shelter/windbreaks.
- **Private native forest:** Production practices, biodiversity/habitat availability.
- **Water resources:** Stream/water conservation, wetlands, springs, dams. (Water Quality tests)
- **Infrastructure type/location:** Stockyards, sheds, fencing/laneways, water troughs, tanks etc.
- **Land capabilities:** Improved pasture & native vegetation management , remnant vegetation, Soil health/type/class, (soil tests).
- **Vegetation:** Species type (pasture improved/native), ground cover %, pasture management (rotational grazing).
- **Land degradation = Soil Conservation:** Erosion/slips = earthworks/contour banks/roll=overs/drainage.
- **Pest & weed control:** Army worms, lantana, 'Indian minor' bird activities etc.
- **Climate variability (change):** Very wet/flooding periods, draught proofing & fire protection, carbon sequestration and methane emissions.
- **Legislative Acts:** Catchment Management Authority, Native Vegetation Plan, Council LEP – Cultural Heritage, Occupational Health & Safety etc.



# STUD & COMMERCIAL LIVESTOCK PRODUCTION

We believe a high performing female is the sum of a good cattle herd.

Our objective is to breed superior commercial 'carcase trait' yearlings. With the aim of turning off 'hormone free' Angus and Angus/Brangus yearlings that meet the MSA (Meat Standards Australia) and butcher market grids by 12 months of age (max.) predominantly from a improved pasture-based system with limited grain supplementary feeding.



Angus HBR cow & calf mob (prior to calf weaning)



Angus/Brangus & Angus steers ready for market

# NATIVE FORESTRY – LOGGING PRODUCTION

Our native forests species are primarily 'spotted gum', 'ironbark', 'grey/red gum', 'stringybark', 'grey' & 'brush box' which are relative to our properties soil type.

All forested areas are accessible to our cattle – Agroforestry. Our forests, apart from providing a forest crop, provides shade & shelter for our stock and helps with erosion & salinity control.



Graded commercial power poles (Spotted Gum) for Qld. NT  
and Asian markets (longest pole length 17.5 metres)

Forest natural regeneration = Measuring a Spotted  
Gum's diameter = 27cm x 24m ht.





# IMPROVED PASTURE MANAGEMENT

We endeavour to maintain growing pastures near the start of the growth phase to aid plant regrowth, ensuring the highest possible pastures quality for our grazing cattle. (1,500 kg green DM/ha).

Through the management of rotational grazing practices and slashing, we have substantially improved and changed our pasture's quality, encouraged soil biota to improve soil structure, increased plant litter quality and breakdown rates, consequently increasing biological activity.



Kikuyu, Paspalum, clover & native grass pasture ready to be grazed in the rotational program



Rhodes grass, Paspalum, Kikuyu, clover & native grass pasture



# ROTATIONAL GRAZING PROGRAM

Stock Management — Stock type relative to vegetation capabilities.

We regularly evaluate the health of our land, calculate feed budgets and create detailed grazing plans as a tool for furthering our production and holistic goals. Cattle are selectively used for our 'prescriptive grazing program' in areas that we determine needs more intensive management .



Angus cow & calf mob grazing in 1 of their 4 allocated pasture improved paddocks (Genetic Rotation)



Brangus cow & calf mob grazing in 1 of their 4 allocated semi-improved native vegetation paddocks (Holistic Rotation)

# Infrastructure example = FENCE LOCATIONS

Planning is the key to good fencing, fencing is a long term investment which should last a minimum of 25 years.

Where possible plan for straight fences as they are cheaper and easier to build. In hilly terrain, consider constructing fence lines following ridge contours relative to landform topography, soil/plant capabilities and livestock mustering methods.



Fence lines located between paddocks on hill slope



Fence lines located between paddocks on flats, hill slope and ridge contours.



# Infrastructure example = PADDOCK FENCING

Electric fencing is employed in permanent & temporary management practices for convenience and security.

Wherever possible, locate gates and laneways for livestock and equipment in the corner of each paddock closest to farm buildings. With relation to paddocks on opposite sides of a road, gates are located opposite each other creating a direct route for livestock to crossover.



Semi-permanent paddock subdivision  
steel post & wire, electric fencing



Permanent paddock division timber post  
& wire, electric fencing

# Infrastructure examples = STOCKYARDS

All yards are designed to be operated in the round and located in relation to our properties topography, fencing locations and our stock's easy access approach.

Due to our property's undulating to steep terrain we manage our stock's mustering travel distance with the establishment of 4 sets of yards. Essentially, taking the yards to the cattle, not the cattle to the yards in an effort to minimise cattle stress and weight loss.



Steel stock yards (2 of 4) located on Property No. 2



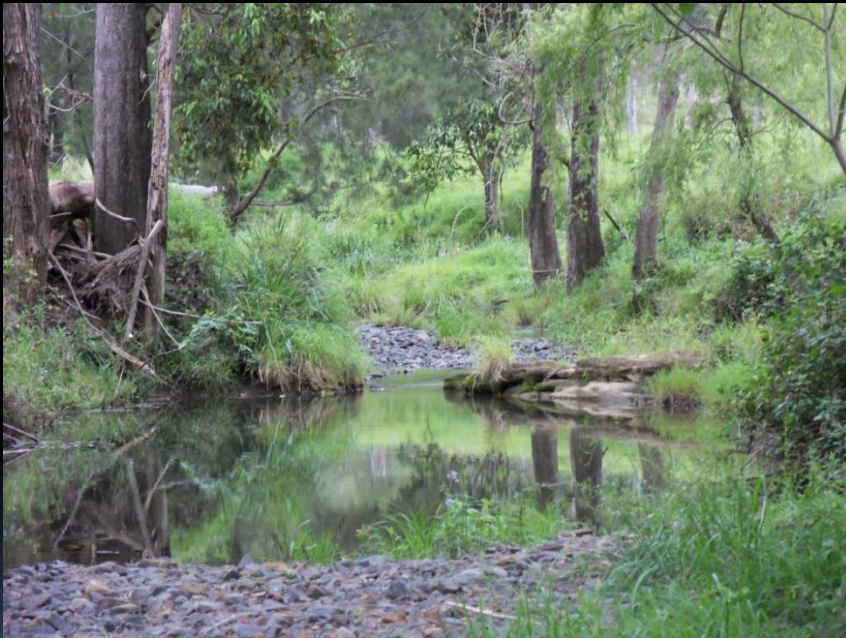
Timber post/rail & steel stock yards (1 of 4)  
located on Property No. 1



# STREAM CONSERVATION = BANK STABILITY

There are no riparian corridors on our properties two watercourses, but we encourage low growing multi-trunked plants, with matted roots; medium fast growing, thin trunked & fine rooted trees; large trees with deep root systems and dense runner mat grass providing bank stability, reducing bank erosion.

Theresa Creek = 4<sup>th</sup>. Order Stream



Creek waterhole during normal water flow



Grass and vegetation growing on banks down to creek bed & waterline

# EXCAVATED DAM LOCATIONS

Water placement locations in pastures impacts grazing distribution.

The Maximum Harvestable Right Dam Capacity is 10% of the average regional rainfall run-off of your property. Dams that are part of the harvestable right of your property can be located on minor watercourses — 1<sup>st</sup> & 2<sup>nd</sup> order streams without a licence.



Highest dam located at the head  
of a 1<sup>st</sup> order stream



Lowest dam located at the base of a  
2<sup>nd</sup> order stream



# WATER TROUGH LOCATIONS

Cattle provided with high quality water will drink more, eat more & ultimately gain weight quicker as dry matter intake is highly correlated to water consumption.

Water transported through a gravity fed trough system around the farm has increased the flexibility of our rotational grazing system, greatly enhancing pasture utilisation and improved production. Our stock prefer to drink from troughs as the water is cleaner, more palatable and easier to access.



Gravity fed concrete trough located  
between fence line on flats



Gravity fed concrete trough located  
between fence line on hill ridge

# CLIMATE VARIABILITY – (CHANGE)

Climate determines the type, amount of grass and herbage growth.

In the past 3 years the Kyogle Shire area has consistently experienced very wet/flooding late summers to mid winters and dry drought springs to green drought early summers.



The devastating Theresa Creek 2008 flood (383 mm Jan.  
– 200 mm for the day)= (1403 mm yearly rainfall)



The harsh realities of drought 2002 (586 mm yearly rainfall)  
– limited grass/feed effecting ground cover %



# EROSION CONSERVATION (Site No. 1)

Gully erosion is a highly visible form of soil erosion that affects soil productivity, encroaches into grazing land, restricts land use and effects fencing stability.

This gully erosion is a relatively steep-sided watercourse located on a western elevation hill slope, which regularly experiences ephemeral flows during heavy and extended rainfall.



Erosion before commencement of repair conservation



Construction of 2 roll-overs

# VALUE OF OUR PROPERTY PLAN

Through careful examination of the effects of our Property Plan Management Program, we're able to adapt and adjust where necessary and also learn which strategies have succeeded in furthering our goals •

Property planning is an essential component of our whole farm operation and an invaluable management tool. Benefits are:

- **INCREASED PRODUCTIVITY** e.g. Heavier weaner weights, increased carrying capacity; increased timber quality and lignotubers.
- **REDUCTION in PRODUCTION COSTS** e.g. Less chemical/fuel use, less labour time working livestock etc. (Minimised mustering stress to livestock, eliminating the use of dogs).
- **REGENERATED and RESTORED PASTURE & SOIL** e.g. Increased ground cover to 90%, in some cases 100% and improved pasture resilience, increased legumes and pH levels.
- **INCREASED BIODIVERSITY/CONSERVATION** e.g. Dung beetle, native bee and bird populations.
- **FUNDING OPPORTUNITIES** e.g. Erosion works.