Developing Systems for Monitoring & Managing – *ie "cause & effect"*

Peter Gaul - Matthews, Missouri

Tiller Cohen Farm – Matthews, MO

- 963 acres, 775 irrigated under 3 pivots
- Soils include sands, clays and mixtures
- Milking up to 1300 cows, currently 875 across summer
- Two farm units – adjoining
- Some shared resources, including support land
- Split calvings, high seasonal workloads
- Two farm managers plus 8 staff & casuals
- Still completing developments
- Not an easy property to manage

Challenges to date

- so many unknowns –
- the impact of "big" weather
- livestock performance & animal health
- farming while still developing the property and business
- grazing management on different soils
- feed management

Why bother monitoring at all?

- *"You get what you get!"*

- Many farmers think they don't have to !!

- the importance of understanding context, and then cause/effect

What to Monitor ??

Monitor things that are relevant to what you are trying to manage.

Factors affecting performance of the business:

- Production
- Productivity & Performance
- Profit
- Sustainability

Production

- Pasture and forages
  - quantity of feed available
  - growth and expectations
  - feed quality

- Feeding history
  - daily, seasonal

- Milk production

Production *(cont'd)*

- Animals
  - by class
  - weight and/or condition
  - animal health
    - Vaccination program
    - treatments

- Weather and soils
  - Paddock or field histories

Productivity

ie outputs relative to inputs

- feed grown per $ spent growing it
- milk produced per amount of feed
- milk produced per $ of feed
- milk produced per $ of expenses
- milk produced per cow, vs milk produced per acre, or per person, can mean quite different things

Performance

- Animal performance
  - milk, breeding, weight, breed,
- Field performance
  - pastures, forages, crops, irrigation, fertiliser etc
- People performance
  - skills, development, teamwork, leadership
  - milkers vary in efficiency – why ?
- *All these need to be monitored to improve efficiencies*

Profit

- Income is not profit

- Production and profit are weakly linked

- Doing the monthly accounts does not necessarily mean that the business is being monitored

- Regular cashflow monitoring is essential

Sustainability

- Is the business profitable, or able to withstand challenges to profit ?

- Is the current farming system sustainable ?

- Is the land / water being farmed sustainably ?

- Is the community on farm (staff and management) being sustained ?

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So what is the minimum to monitor to understand "cause/effect" ?

- Production – 3 items
  - pre/post grazing heights
  - pasture or forage growth rates -
  - daily milk production and cow numbers

- Productivity – 3 items
  - feed grown per $ spent growing it
  - milk produced per $ of feed
  - milk produced per acre
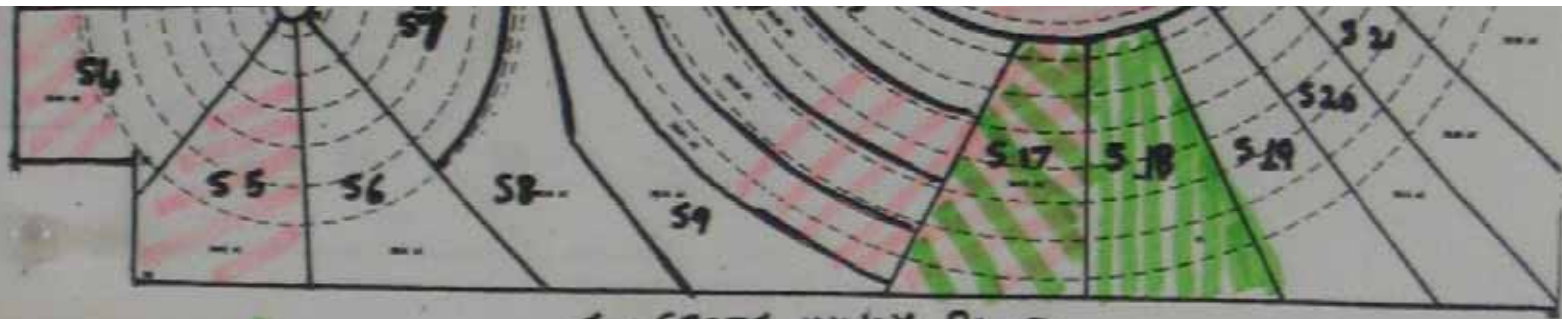
So what do we monitor to understand "cause/effect" ?

- Performance – 3 items
  - Animal performance – herd testing
  - Field performance - pasture/forage growth/field/year
  - People performance – an effective, user-friendly performance review twice per year for every team member

- Profit – 2 items
  - realistic budgeting
  - monthly cash flow, especially expenses relative to budget

So what do we monitor to understand "cause/effect" ?

- Sustainability – 3 items
  - profit
  - "good" stewardship of the resources
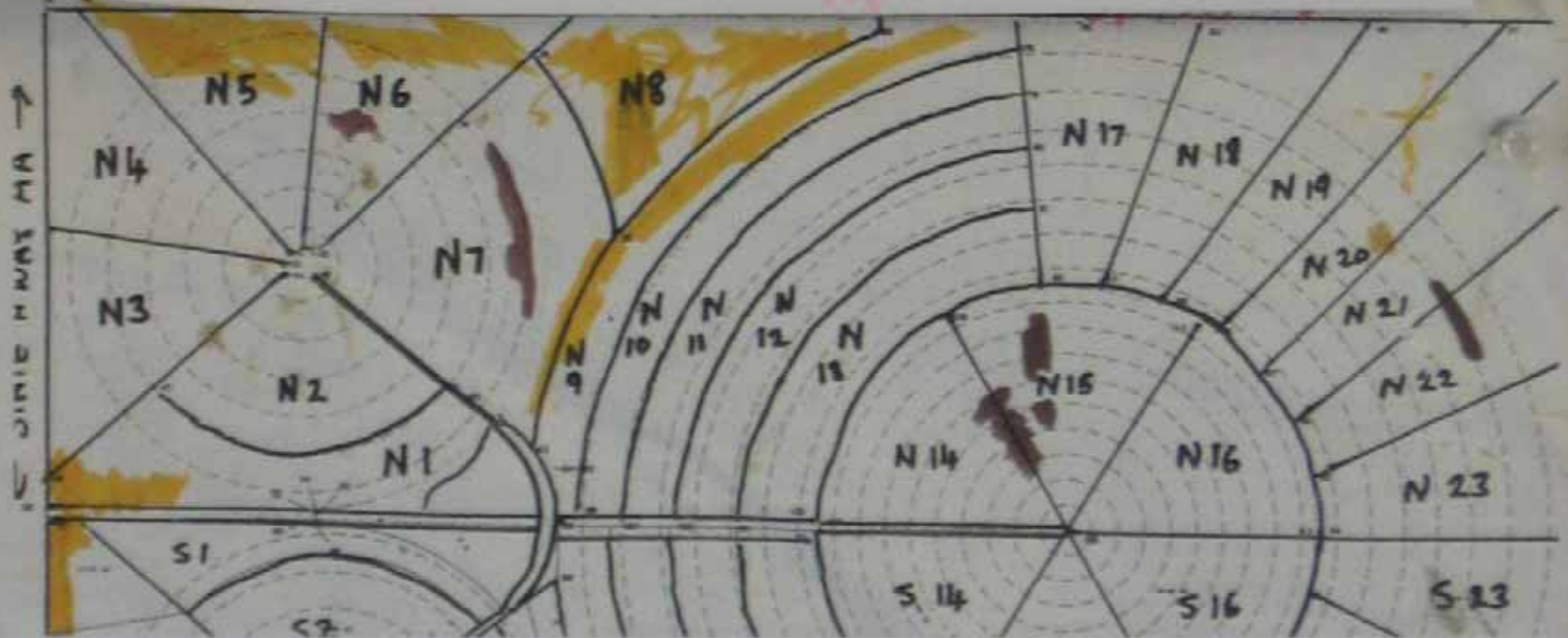 - staff and team morale

The practical stuff - farm

- Plate meter
- On-farm
  - farm maps used every day by staff
  - herd movement plans on whiteboard
  - farm maps provided for all contractors
  - field markers on posts for area definition
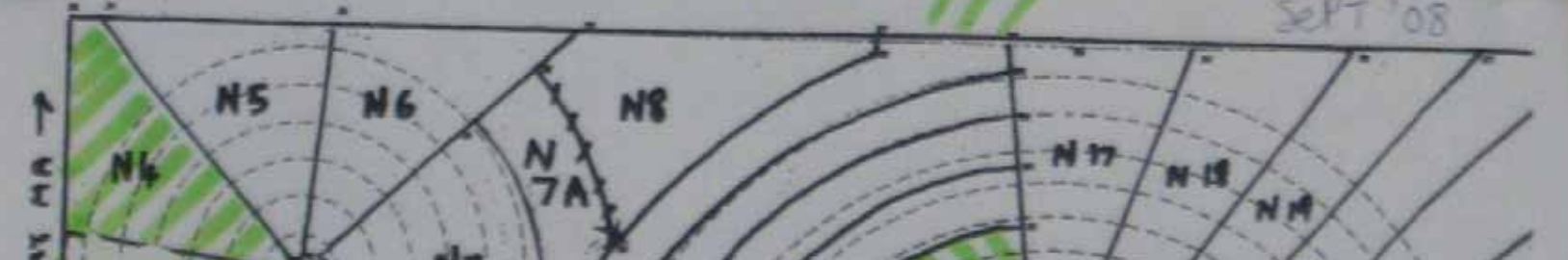 - colour-coded electric fence posts

← STATE H'WAY 80 →

cultivate

bush-hog

N5   N6   N8

N4   N17   N18   N19

N3   N7   N20

N10 N11 N12 N21

N9   N13   N22

N2   N15   N14   N16

N1   N14   N23

S1   S14   S16   S23

S2

Tiller-Cohen Farm LP   Spray R/up   Sept '08

N5   N6   N8

N17   N18

N4   N7A   N19

The practical stuff - animals

- Cow marking
  - tail tapes, color coding – essential for the treatment herd
  - paints and markers – drafting, kickers etc
  - ear tags and eartag-rings
  - leg bands: - two colours, & left/right legs = 4 combinations

The practical stuff - people

- balance between hard copy and computer
- more visual and practical tools for training / development
- flexible or fixed rosters ??
- team members are the best eyes/ears
- balance in the team
  - personalities
  - skills

Summary

- Design or copy or adapt workable systems

- Keep it simple

- Remind people why their monitoring has paid dividends – give examples

- Do not overload busy people with onerous recording tasks

- Take time to analyse