A pasture health kit developed by the SGS North-West Slopes producer group and NSW Agriculture

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Increasingly, producers are becoming much more aware of pasture production and sustainability issues as a result of the Sustainable Grazing Systems Key Program and initiatives undertaken by NSW Agriculture. Up until now there has been no simple, easy-to-use guide that graziers can use in their paddocks to quickly assess the health of their pasture systems on a paddock basis. Without such a guide it is often difficult to know at what level a pasture is performing, if the current management is okay, or what parts of the pasture need to be improved.

To address these issues a pasture health kit has been developed, initially for pastures on the North-West Slopes of NSW, but the concept can readily be adapted to other areas. It contains a simple guide that requires little training or equipment and so it can be used in the paddock on a day-to-day basis.

The checklist system

It consists of a seven-point check list to assess pasture production and sustainability (Table 1) based on things that a grazier can see and subjectively measure. These include; ground cover, proportion of productive pasture species, litter, soil surface condition, proportion of green to dead leaf, percent legume, and, animal production. While animal production is important it is deliberately placed last on the list. Most producers have good skills at assessing animal condition, but are less likely to monitor pastures and soils.

When using the guide, graziers assess the seven indicators as having either a low, medium or high score. Acceptable levels of these different categories are included in the guide (Table 1). Indicators with low values immediately highlight those areas that are in most need of management to improve them. If all areas are given a high score, then the pastures are probably on-track and in good shape, but they should continue to be regularly monitored.

Conclusion

The field guide has proved to be popular with producers. They have found it to be particularly useful in breaking down the pasture system into some, simple easy to follow parts that can be readily seen and assessed. The pasture health kit also contains coloured photos of different levels of ground cover, a quadrant to place on the ground and assess the indicators and information of ground cover, runoff and soil micro-organisms.

Table 1. Pasture production and sustainability indicators with notes on how to assess low, medium and high levels. When using in the paddock, graziers fill in a sheet that has the low, medium and high columns blank.

FIELD GUIDE
INDICATORS OF PASTURE PRODUCTION AND SUSTAINABILITY

Is your pasture producing at its potential, degraded or degrading slowly? This simple check-list will help you monitor your resource. Assess each pasture on a paddock basis.

INDICATORS	LOW	MEDIUM	HIGH
Ground Cover A minimum on the North-West Slopes of NSW is 70%.	(less than 40%)	(40 - 70%)	(more than 70%)
Litter The unattached plant material on the soil surface. Aim for 2 - 3 handfuls per 0.1sq metre (1 square foot).	(less than 1)	(1 - 2)	(more than 3)
Soil Surface Hard or soft to the push of your finger or pen.	(no indent)	(small indent)	(soft and easily marked)
Proportion of Productive Pasture Species Desirable species should be more than 60%.	(less than 45%)	(45 - 60%)	(more than 60%)
Proportion of Green to Dead Leaf Assess on a dry matter basis It is species and season dependent. Aim for more than 60% green in the main growing season	(less than 20%)	(40%)	(more than 60%)
Percent Legume Assess on a dry matter basis. It is seasonal and species dependent. 10% is high for native pastures, 20% fertilised natives, 40% improved pastures.	Native (less than 1%) Fertilised Native (less than 5%) Improved Pasture (less than 10 %)	(1 - 5%) (5 - 10%) (10 - 30%)	(more than 10%) (more than 20%) (more than 40%)
Animal Production Relate it to the total amount of dry matter, the proportion of green and animal condition (weight gain or loss for sheep or cattle).	(losing wt)	(maintaining wt)	(gaining wt)

LOW: *If the total of your scores has 3 or more "X's" for LOW sustainability and production then you need to rethink your present grazing management to bring the soil and pasture back into a more productive state. Indicators that scored low are the areas that need management input.*

MEDIUM: *If most of your scores are in the MEDIUM range, your pasture is in the balance and easily affected by overgrazing or drought conditions. The pasture is not in bad condition, but concentrate on those indicators with low or medium scores to improve productivity and sustainability.*

HIGH: *If you scored mostly HIGH, well done, your management has achieved a productive and sustainable pasture. If you had 1 or 2 low or medium indicators, concentrate on improving these areas. Continue to monitor the indicators.*