100 years of advancing agriculture

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As the Department of Agriculture's centenary year draws to a close, we look back at the pioneering agriculture of 100 years ago and those things that shaped our forerunner, the fledgling Bureau of Agriculture.

In 1894, Western Australia was experiencing rapid growth in population stimulated by gold discoveries in the 1880s and early 1890s. Population jumped from 44,000 in 1889 to 184,000 by 1901. Increased food production in the staple commodities of wheat, meats, dairy products and fruit and vegetables became urgent.

Expanded agriculture also needed a formal body to guide, regulate and protect the industry. The first Premier, Sir John Forrest formed the Bureau of Agriculture in 1894 and it was renamed the Department of Agriculture in 1898.

Expansion of farming
Several parallel developments aided the expansion of agriculture in the 1890s. The Agricultural Bank (which became the Rural and Industries Bank in 1945 and was renamed BankWest in 1994) was also established in 1895 making it easier for settlers to obtain loans to clear land and make farm improvements.

Railways opened up land to the east and south of Perth, and the authorising Act for the Mundaring Weir and Goldfields Water Scheme (1896) encouraged settlement and farm production in the wheatbelt. Two vital items of infrastructure were to come from the plans of innovative engineer, C.Y. O'Connor – water for wheatbelt settlements via the Mundaring-Kalgoorlie pipeline, and better shipping through large scale improvements to the port at Fremantle.

Meanwhile, technological improvements were also helping farmers. Three or four furrow stump jump ploughs had considerable advantages over a single furrow plough. Hand-broadcasting of seed gave way to horse-drawn cultivator and seed box. As phosphate fertilisers such as guano and superphosphate were introduced, machines with separate boxes for seed and fertiliser were developed.

Reapers and binders replaced scythes and horse-drawn mowers for cutting grass and crops and stripper machines imported from Victoria aided harvesting of mature crops. Stripper-harvesters that did the full job of stripping, threshing and winnowing grain ready for sale were used from the early 1900s.
**W.J. (Jack) Toms** (1953–1987) is enjoying retirement at Como. Visits to a Denmark holiday house and fishing are favoured pursuits. Jack was Chief of the Division of Plant Production, and then Assistant Director. He says agriculture as we know it today is so new that most of the light land in agricultural areas was undeveloped when his career began.

**Maurice Cullity** (1925–1968) in the study of his Nedlands home. His trusty Leica camera purchased in the early 1950s (foreground) took many of the slides he used for talks to dairy farmers. Maurice’s career culminated as head of the Dairy Branch. He played a leading role in development of the modern dairy industry.

**H.G. (Jack) Neil** (1948–1981) enjoys gardening in retirement at Claremont, also bowls, travelling, gold prospecting and Legacy. Jack was Officer-in-Charge, Sheep and Wool Branch at South Perth (1963) and Chief of the new Division of Animal Production (1976). He is perhaps best known for development of the West Midland sandplain and of the live sheep export trade to the Middle East.

**R.F. (Dick) Buckley** (1939–1982) is pictured with wife Verna (formerly with the Dairy Laboratories) on the deck of his home near Cottesloe Beach. Dick was head of Stores Branch and was largely responsible for shaping the present structure of Supply, Transport and Engineering Workshops. He organised the selection, collection and restoration of agricultural machinery now displayed at Avondale Research Station, and the building of the large shed that houses the collection.
Agriculture staff – past & present

A.R. (Dick) Tomlinson ISO (1931–1980) on retirement from the Agriculture Protection Board (APB) after 49 years of government service. Dick became Chairman and Chief Executive Officer of the APB when it was established in 1951. A major career highlight was a successful control program to combat the rabbit plague of the early 1950s.

C.F.H. (Clee) Jenkins MBE (1933–1973) in his Claremont study, surrounded by a lifetime’s collection of scientific literature and his own published works. Clee was promoted to Chief of the Division of Biological Services in 1964. One of Australia’s best known naturalists, he has written four books since 1977 and produced nearly 3000 popular and scientific articles since 1929.

Gillie Brown (1982–) preparing a spring field day talk for growers. Gillie became the Department’s first female adviser when she was appointed to Narrogin in 1982. While Officer-in-Charge of Crop Variety Testing, she expanded the annual Crop Variety Sowing Guide for Western Australia. She now heads a special task force, the Wheat Market Project.

Marcia Vistisen (1976–) in the reception room of AGWEST Seed Quality at South Perth. As Senior Seed Analyst, Marcia runs the Seed Testing Station, trains staff, issues seed analysis certificates, phytosanitary certificates for export seed (freedom from live insects and other requirements of importing countries), and identifies seeds for Commonwealth plant quarantine.
Our role

The Journal of Agriculture of 3 April 1894 described the new organisation's aims: "One of the chief objects of the Bureau (of Agriculture) will be to act as a board of advice to the agriculturalists of the colony, and it is hoped that those interested in agricultural pursuits will not hesitate to consult the Bureau at all times on matters relating to the welfare and management of their land, their crops, their trees and their stock."

The Bureau's principal objectives were to:

- Devolve the dispensing of agricultural information from the pastoral, agricultural and viticultural associations to the Bureau. Until 1894 these groups had been the main sources of agricultural information for producers. The Agricultural Society, formed in 1829, was granted Royal status by Queen Victoria in 1890.
- Set up district experimental stations (based on models seen to operate successfully in the United States and in Victoria).
- Build up knowledge of the principal soils and provide a soil analysis service (at modest cost) to farmers.
- Provide meteorological information to farmers.
- Help develop the dairy industry.
- Provide a guarantee of purity for chemical manures. (Adulteration of manufactured manures at this time was a common complaint worldwide.)
- Import and evaluate new varieties of fodder plants, cereals and fruit trees.
- Prevent the introduction of noxious weeds and eradicate existing noxious weeds.
- Eradicate insect pests and inform growers how they may also recognise and destroy such pests.
- Monitor foodstuffs for adulteration.
- Provide a standard nomenclature of fruits to avoid the use and sale of inferior types.
- Encourage the introduction of new and improved agricultural machines.

And to show that being tuned to the needs of the market is nothing new:

"...to watch the existing markets and endeavour to open up new outlets for the products of the soil..."

The report on the work of the Bureau concluded: "It is to be hoped that the agriculturalists of the colony will find plenty of work for the Bureau to do, and that they will take the same deep and earnest interest in the Bureau that it takes in their welfare."

The Department today

Over the intervening century, many things have changed, but some goals remain very similar. Today the Department of Agriculture has offices and research stations at 42 locations ranging from Esperance in the south-east to Kununurra in the Kimberley.

Our mission is to help rural and allied industries achieve their optimum contribution to the sustainable development of Western Australia.

We find similar threads when comparing modern objectives with those of 100 years ago. Perhaps the most pronounced difference is today's emphasis on farming in ways that limit damage to the environment while offering sustainability and continuity.

Current objectives seek to identify market opportunities and help to develop new and improved products; develop farming systems that give maximum financial returns while conserving land resources; help producers to manage risk and uncertainty; minimise the impact of diseases, pests and weeds; and ensure safety and quality standards are maintained in agricultural products.