



898 ha total area



Annual rainfall 443mm



11 km Southwest of Northam

# MURESK INSTITUTE FARM

## CULTIVATING MODERN AGRICULTURE

Muresk Institute is Western Australia's skills hub for modern agriculture. Our core focus is to work closely with our partners to bring the best industry driven training opportunities, knowledge and skills to Western Australia.

Situated on 898 hectares of research and farming land, Muresk Institute provides access to contemporary learning spaces and the latest innovations in agricultural technology practices.

### FARM MISSION AND PURPOSE

To demonstrate sustainable agricultural management and dryland farming systems, which support training and workforce development.

### TRAINING, RESEARCH AND DEVELOPMENT

We are a specialised agricultural facility for training, education and professional development.

Farm facilities and resources are available for practical learning and demonstration.

The Farm is a key site for hosting cutting edge research and development activities in collaboration with industry, university and government. It has:

- » a 6 stand shearing shed;
- » custom designed sheep and cattle yards; and
- » a controlled environment animal house.

Research activities include:

- » plot based breeding and agronomy cropping trials;
- » livestock feed, behaviour and disease monitoring studies;
- » desalination projects; and
- » WA Merino breeders Sire Evaluation Program.

### TECHNOLOGY AND INNOVATION

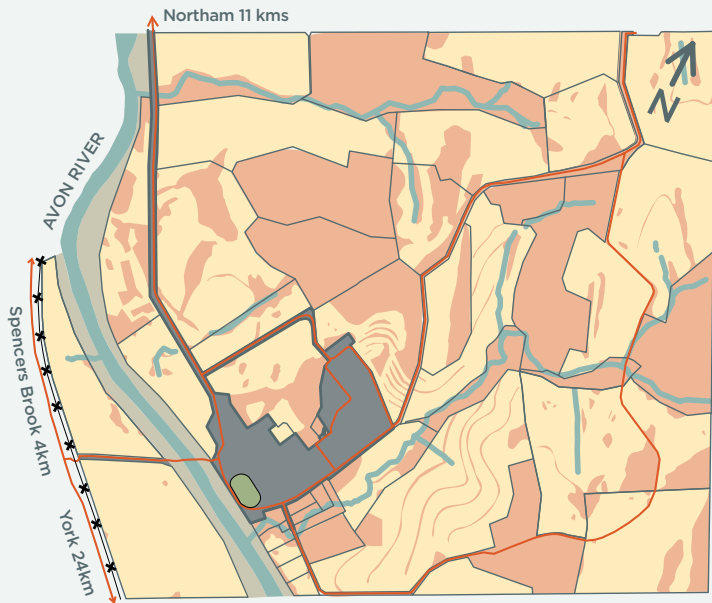
Muresk Institute is home to Western Australia's first public cloud-based SMART farm demonstration site.

The farm has a 12 metre communications tower with a LoRaWAN Gateway, and a base station for WiFi with various access points across the site. Monitoring system sensors supply live data on:

- » water trough and tank levels;
- » soil moisture and temperature sensors;
- » status of gates;
- » CCTV security cameras;
- » weather stations;
- » fuel tank levels; and
- » vehicle tracking.

**LoRaWAN**  
**Gateway**  
farm wide wifi





**Legend**

- Cropping zone
- Non-arable zone
- Riparian zone
- Institute grounds
- Muresk oval
- Avon river
- Water course
- Fence lines
- Roads
- Railway lines



The terrain ranges from the river flats adjacent to the Avon River, to steep slopes that are challenging for machinery operation.



The livestock graze on sub-clover and serradella. Perennial shrubs are planted as part of the biodiversity strategy of the farm and form an additional grazing resource.

**CROPS**

The cropping program is a rotation of cereal grains, canola and legume pastures. Primarily barley and oats are grown for livestock feed with canola and wheat being grown as cash crops. There is a strong emphasis on pest and weed control and good soil health.



The soil types on the farm are characterised as duplex loams while there is a dolerite dyke (subvolcanic rock) that transects the farm

The Muresk Farm utilises no-till, no-burn practices with modern machinery and precision agriculture technology producing high yields.

**BIOSECURITY, ANIMAL WELFARE AND SAFETY**

The Muresk Institute prides itself on maintaining the highest standards of animal welfare and biosecurity and ensure a safe working environment for staff and students.

**LIVESTOCK AND PASTURES**

Muresk Institute Farm runs a self-replacing Merino flock of approximately 850 ewes plus replacements. Additionally, a 200 ewe self-replacing Dohne flock is run in collaboration with the Dohne Breeders of Western Australia. The breeding objective is to produce a fast growing, low care, dual purpose animal.

A herd of 35 Murray Grey Cows are artificially inseminated to Angus bloodlines.



For more information: T: 1300 994 031 | E: muresk@dtwd.wa.gov.au