

FEEDSMART.CO.NZ

The feed planning app for sheep and beef farmers.

INTRODUCTION

The FeedSmart app was developed by the Red Meat Profit Partnership and Beef + Lamb New Zealand to make it easier for farmers to plan stock feeding. It takes the feed tables published in books such as “A guide to feed planning for sheep farmers” and makes them available at the click of the mouse, or the tap of your finger. FeedSmart works on any computer, tablet or Smartphone. It can be saved so that it works offline - anywhere, anytime.

USING THE FEEDSMART APP

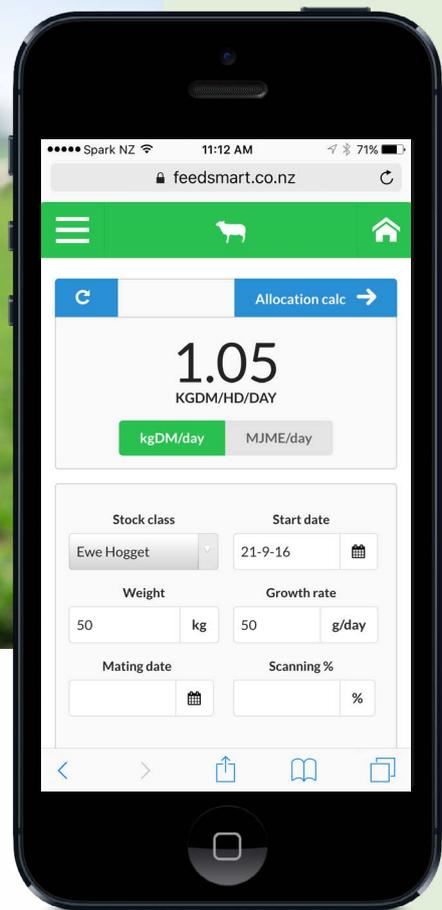
Simply go to **FeedSmart.co.nz** and it's ready to go (to use off-line refer to 'Saving the app to use it offline').

We've made a series of videos showing how to use the app - you can find them at [youtube.com/beeflambnz](https://www.youtube.com/beeflambnz) (using keyword “FeedSmart” in the search box).

To calculate stock intake requirements:

1. Select the species (cattle or sheep).
2. Select the stock class from the dropdown menu.
3. Select the date (the app will automatically use the current date but you can set it to any date in future).
4. Enter the stock liveweight at the time for which intake is being calculated.
5. Enter the desired liveweight gain per head per day (if you want to know maintenance, just leave this at 0).
6. If the stock is mated, enter the mating date (and scanning percentage for sheep).
7. You can view the required intake in kgDM/hd/day or MJME/head/day.

Note: the calculated figure is intake (the amount they actually need to eat). You still need to allow for utilisation and residual.



ALLOCATION TOOLS

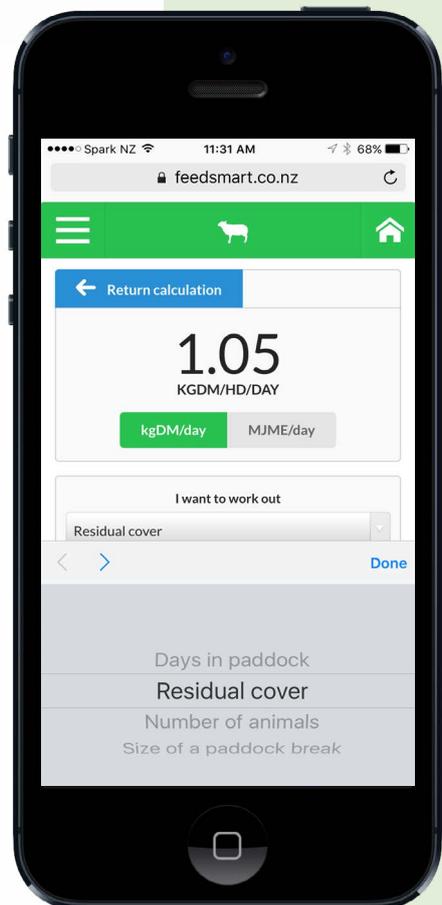
Once you have calculated the required intake for a single animal, you can perform an allocation for a mob of animals using the allocation tool. Click on the 'Allocation calc' button in the top right, then select the calculation you want from the dropdown menu.

This allows you to calculate the following:

- **Days in paddock:** This uses starting feed covers and determines how long stock can remain in the paddock, assuming a required residual cover. This takes into account the pasture growth rate and the changing animal needs throughout the period, e.g. the animals are gaining weight and therefore require extra feed for maintenance. This option will only predict the number of days up to 50 (days) because pasture and animal growth is likely to be unpredictable for longer periods.
- **Residual cover:** This is the opposite of the Days in paddock option. It determines how many days the animals can be left in the paddock to maintain the required residual cover.
- **Number of animals:** This takes into account the starting cover, the required residual cover and how many animals can be left in a paddock for any given number of days.
- **Size of a paddock break:** To determine the length of the paddock break taking into account animal demand.

Two additional factors impact the allocation results:

- **Supplementary feed:** Supplementary feed (kgDM per head per day) can be included in the calculations. The energy (MJME) of the supplementary feed can be specified in the settings. Supplementary feed is always consumed before pasture/crops when determining allocation results.
- **Feed utilisation:** How much of the feed is consumed by animals, and how much is wasted. This can be specified in the Settings and defaults to 90% utilisation. The value entered affects both pasture/crops and supplementary feed.

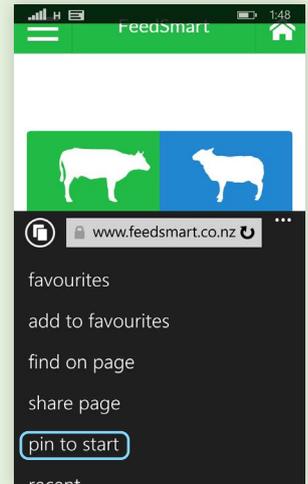
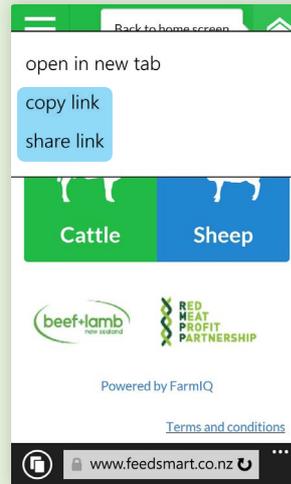
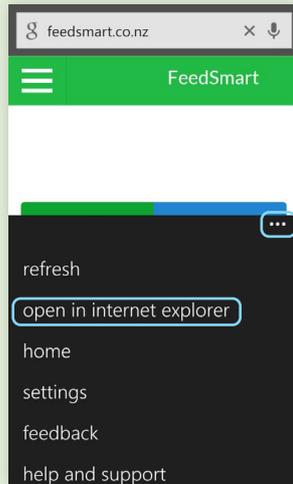


SAVING THE APP TO USE IT OFFLINE



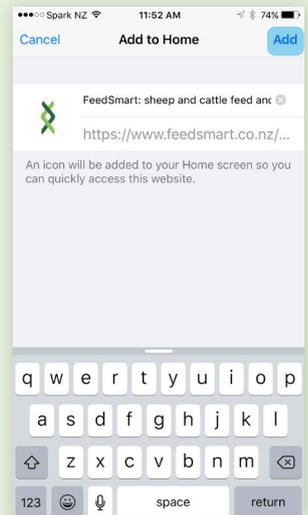
WINDOWS PHONE

1. Tap on the 3 dots in the right hand corner and then tap 'open in internet explorer'.
2. Tap *copy link* or *share link* then tap on the "E" on your mobile home page.
3. Click on 3 dots again and select pin to start.



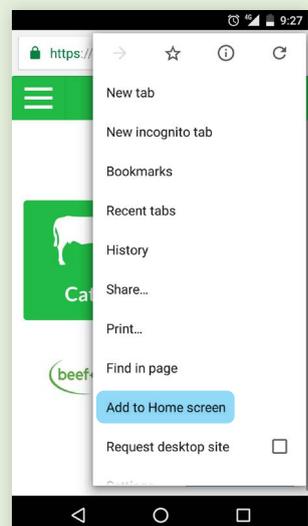
IPHONE AND IPAD USING SAFARI BROWSER

1. Tap the share button: the icon in the middle at the bottom of the screen.
2. Then, tap on the icon that says "Add to Home Screen".
3. You can choose the name and then tap "Add" which is in the top right of your screen.



ANDROID USING GOOGLE CHROME AS THE BROWSER

1. Tap the 3 dots in the top right hand corner.
2. Tap "Open in Chrome"
3. Then tap the "Add to Home screen"

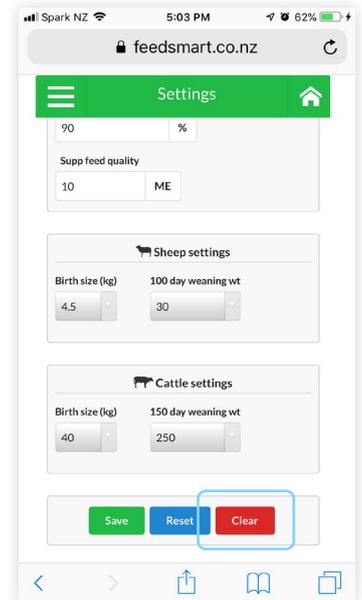


CUSTOMISING THE FEEDSMART APP

The app works on a series of standard defaults for land type, feed quality and stock performance. To fine-tune the result, these settings can be adjusted for any specific situation. Just click on the Settings icon on the computer, or go to settings in the Menu on tablet and Smartphone. Once these are adjusted, click 'Save'. If you want to go back to the defaults, just click 'reset'.

You can adjust the defaults as many times as you like, for different blocks, crops, supplement and stock.

Troubleshooting: If the app fails to operate properly at any stage, it may be that the cache is full. Press the 'Clear' button in Settings.



GENERAL INFORMATION

The FeedSmart feed calculator, which forms the app, uses a model developed by FarmIQ from Beef + Lamb New Zealand information, to calculate feed requirements for animals which allows you to calculate pasture/crop usage when moving animals to paddocks.

This calculator determines the Megajoules of Metabolisable Energy (MJME) required by livestock based on a variety of factors. It then determines how much dry matter is needed to fulfil this requirement and uses a conversion rate of 10.8 MJME = 1kgDM as the default. This can be over-ridden in the Settings screen (for instance, if the animals are being fed crops with a higher energy level).

By default, the calculator will determine the animals' daily feed requirements. The start date can be changed, so you can determine animals' future feed requirements. This is useful when animals are gaining weight or pregnant, because their demands in the future will be different from their demands today.

The calculator takes into account the following:

- **Maintenance requirements:** How much feed does an animal need to maintain its current weight? This uses the current weight of the animal and the type of land the animal is grazing on.
- **Animal growth:** How much feed does an animal require to gain a specified amount of weight each day? This shows how much weight the animal is gaining, the size of the breed and their stock class. For instance, a ram lamb has different requirements from a ewe lamb.
- **Pasture/crop quality:** What is the impact of the feed quality on animals? Animals need more MJME/day where the feed is a lower quality.
- **Pregnancy:** How much extra feed does a pregnant dam require? This depends on the scanning percentage of the dam, how far through the pregnancy the dam is (as calculated from the mating date) and the predicted birth weight of the offspring.
- **Lactation:** How much extra feed does a lactating dam require? This depends on the birthing %, how long ago the offspring were born (as calculated from the mating date), and the weaning weight of the offspring.

FOR MORE INFORMATION

To find guideline values for pasture, crop, forage and feed quality and pasture growth rates, check out:

- "A guide to feed planning for sheep farmers" found here: <http://tinyurl.com/gtvbt3k>
- "Pasture Growth Forecaster" tool found here: <https://apps.farmax.co.nz/pasture/BeefLambNZ>
- FeedSmart 'how to' videos can be found at: youtube.com/beeflambnz (using keyword "FeedSmart" in the search box).

Troubleshooting

Perform a reset if you have a problem with the app operating or the results seem incorrect. Go to Settings, at the bottom of the menu tap on the blue 'Reset' button.

