

## Palm Farming Partnership Technical Summary

Palm Farming Partnership currently uses Precision Ag Technology on their John Deere equipment. Usage of this equipment has allowed all employees to have experience setting up hardware and utilizing mobile applications to interact with the technology. Usage of this equipment allows them to see connected devices across the entire 16,400 acres of the organization. Usage of the requested equipment as part of this grant will allow the farm manager and employees to leverage those same capabilities on the ranching part of the operation to care for over 1,300 head of cattle.

Because of these devices being connected via a satellite, no other wired network is required for these devices. Using a satellite, readings can be acquired 4 times per day which will be 4 times more than what can be monitored today with a hired worker. This will not only save time and expenses but also ensure a healthy herd at all times.

These devices run on battery power. Using a satellite connection it is recommended to change the batteries every 2-3 years on the device. Annual maintenance will be performed by Palm Farming Partnership to ensure devices are functional and to change batteries if required. To extend the life of the devices, a housing device will be created around the mounting post to protect the device from snow, wind, hail, or any other weather events to ensure the value can be realized for more than five years.

These devices are easy to move around with the herd since they can connect from anywhere. It is also very easy to add more devices to the fleet of equipment as the partnership continues to expand.