SCOUTING ALFALFA SEED FIELDS WITH UAV (DRONE)

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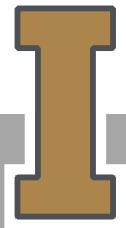College *of* Agricultural *and* Life Sciences
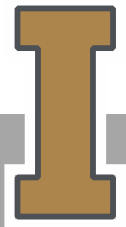
STAKEHOLDER INPUT

At meetings with alfalfa seed growers we discussed how drones could be used in alfalfa seed production. We have been cautioned not to duplicate what private industry is already doing, i.e. aerial photos, NDVI images. Do something that no one else is doing.
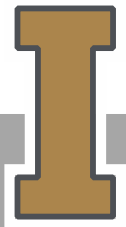
SUMMER, 2016

SUMMER, 2016

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WINTER, SPRING, 2017

- Applied for and received U of Idaho Extension System Innovative Projects Grant

- Studied for the FAA UAS exam, took the exam and passed in early 2017

- Purchased DJI Phantom 4 Pro drone

- Worked with Lynn Nichols to identify alfalfa seed fields to use in 2017

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EARLY JUNE, 2017

- Flew the drone in Larry Story's alfalfa seed fields near Roswell.

- For the first few weeks tried several different devices, none of which were very successful.
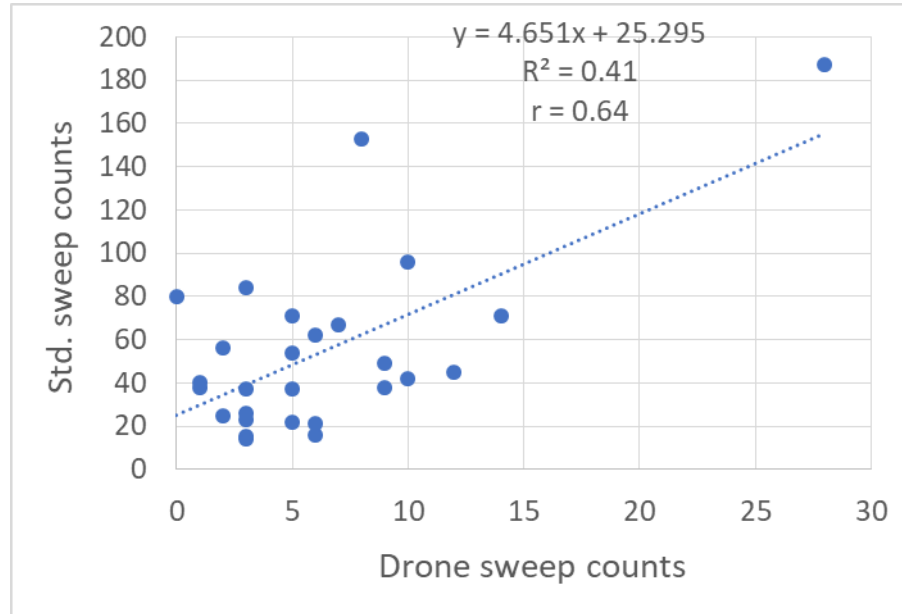
JULY, 2017

- Moved on to try other devices, finally came up with a modified sweep net
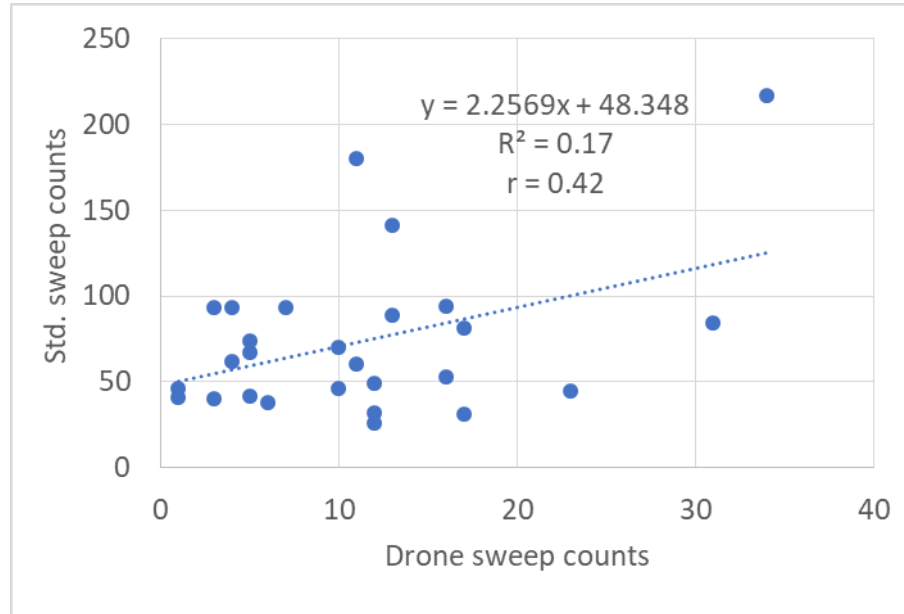
- 12 inch diameter hoop with a net attached

JULY, 2017

LYGUS NYMPH COUNTS

TOTAL LYGUS COUNTS

PLANS FOR 2018

- Already secured funding to conduct a full season of using the modified sweep net with the drone

- Will add an NDVI sensor to take images of the field each time we sweep to gauge stress

THANKS TO …

Lynn Nichols

Larry Story

Paul Rasgorshek

Leland Tiegs

For their help with this project

QUESTIONS?

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