Tips for Successful Stand Counts with Your Drone

One of the best applications of drones in field trials and production agriculture is collecting stand counts. It’s also a metric that requires high resolution imagery captured within a critical small window of time. Here are our recommendations for image acquisition:

- **Fly early**, ideally after all the seedlings have emerged, but before many of them are touching in the imagery (see examples of early, optimal, and late flight timings on the right). This can occur as soon as 7 days after planting, so make sure your drone is tested and ready to fly before planting if possible! A few touching seedlings is OK.
- **Fly at low altitude, but not too low!** (40-50 ft) so the resolution is high enough to clearly resolve stands (less than 0.5 cm/pixel) while whole plots still fit completely inside individual raw frame photos.
- **Capture 80% forward & lateral image overlap** for fast & accurate image stitching and 5-20 replicate images of every plot.
- **Consider using Progeny for rapid in-field stitching & quality control** so you never have to return to a field site to re-fly it. We are here to help ensure your data collection goes smoothly and you get the most out of the equipment and hardware you already own!

For help getting started, please visit: www.progenydrone.com

Progeny works with:
- Any drone
- Any camera
- No internet
- No shapefiles
- Low-grade GPS

It provides:
- Stitched ortho-mosaics in 10 min
- Custom plot gridding & labelling
- Plot-level output images & metrics
- Replicated measurements with standard deviations