2024 Jon Clements Featured Speaker at the New Jersey State Horticultural Society Summer Meeting and Orchard Tour

Win Cowgill
Professor Emeritus Rutgers University
Win Enterprises International, LLC

Jon Clements
Extension Educator, University of Massachusetts Amherst

Wightman Farms, Morris County NJ and owner Adam Costello welcomed the New Jersey State Horticulture Society and other farmers on a summer educational meeting and research tour for commercial fruit growers and industry representatives on June 27, 2024. Twenty five growers participated on a beautiful sunny early summer day, sponsored by the New Jersey State Horticultural Society.

Wightman Farms owner Adam Costello led a farm tour/wagon ride of the orchard. Win Cowgill, Jon Clements and Adam provided demos and instruction of growing tall spindle apples, summer pruning apples, precision apple crop load management, and peach and cherry culture. Jon Clements, Extension Educator, University of Massachusetts was the featured guest speaker. Jon demonstrated and spoke on using a drone and ATV-mounted camera for precision apple crop load management and yield maps. Using Outfield (outfield.xyz) and Vivid Machines (vivid-machines.com) for the drone and ATV-mounted camera respectively, he showed how multiple programs — such as blossom and fruit variability "heat" maps — can be used for better precision apple crop load management using plant growth regulators for thinning thereby improving profitable yield and return bloom. The link below highlights the handout Jon provided on the new Outfield technology.

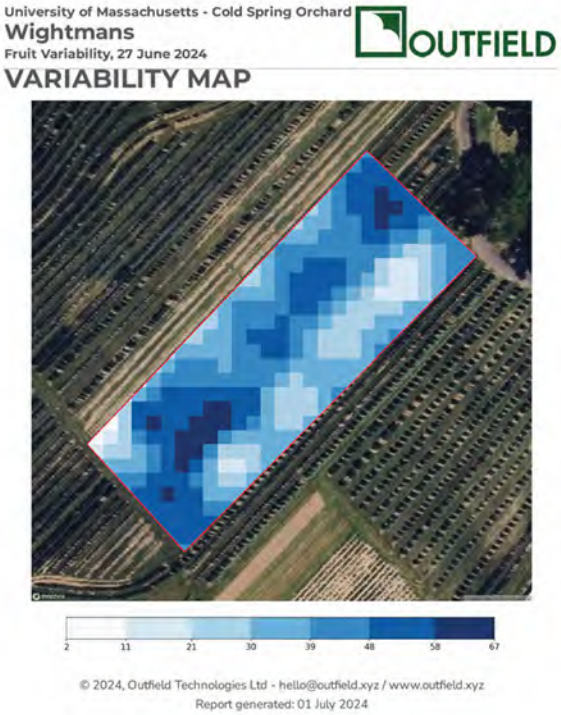
Jon demonstrated and spoke on using Outfield drones/ Vivid Machines- for apple crop load management and yield maps. Jon will also review multiple programs for better predicting crop load management for better precision with plant growth regulators for improved yields and return bloom.

Jon Clements, Extension Educator, University of Massachusetts was the featured guest speaker.

The link below highlights the handout Jon provided on the new Outfield technology.

Precision Apple Cropload MANagement (PACMAN)- Link to the Precision MGT handout from the event.

Jon demos the drone flyover of one of Wightman's apple locks which resulted in the fruit variability map - Photo: Win Cowgill.



Outfield fruit variability map produced post-flyover

Outfield Drone- Photo Jon Clements

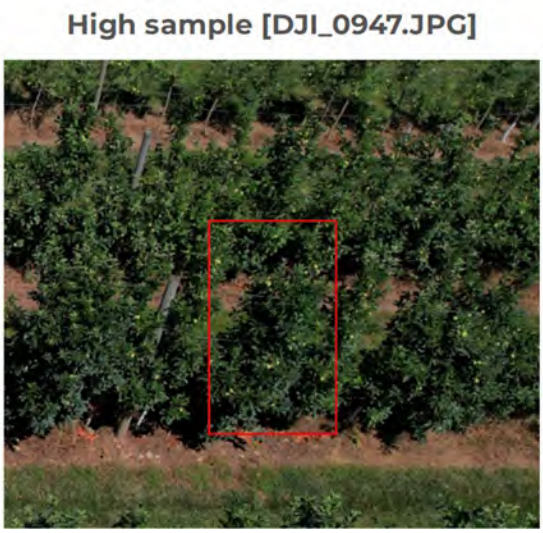
DJI drone controller with flyover map displayed on the iPhone - Photo: Win Cowgill

Wightman Farms aerial view - Photo: Wightman Farms

Vivid Machines (vivid-machines.com) camera mounted on the hood of the Kubota ATV.

From left to Right- Adam Costello, Jamie Bourgeois, Kary Broadhecker, Tim VonThun, Tor Andersen

Example of High sample apple tree as seen but the Outfield drone flyover



Wightmans Drone View of High Crop Load Trees

Brookdale Farm Supplies

Toro Tempus Ag Controller, a revolution in automation

The toro tempus ag controller allows for full farm automation. Tempus Ag uses a LoRA radio signal to create a bubble which allows for system automation. 1 base station produces a LoRa bubble of 5,200 feet in diameter. Multiple base stations can be added to cover large areas over one network for the entire application. The base stations can be operated on Wi-fi or with a 4G wireless signal. It can run irrigation cycles as well as collect environmental data, allowing growers to adjust their irrigation schedules as needed. Tempus Ag can report on a variety of sensors; temperature, pressure, soil moisture, humidity and more. Tempus can send alerts via text or email at thresholds determined by the user. Call us to design your custom system.

RAS-Rotary Mower. Ideal for mowing orchard rows.

SLR-Sucker Remover
Great for sucker and weed control.

Sweeper
Ideally for keeping under the trees clean for PYO.

Rinieri

Shredder/Flail Mowers
Ideal for chipping brush, managing field edges, handling cover crops

FORIGO

Brookdale Farm Supplies

38 Broad Street
Hollis, NH 03049
603-465-2240
www.brookdalefruitfarm.com

The REVO Piuma 4WD Harvester

- For apple & pear high-density orchards
- Picking, pruning & trellis work
- Independent front & rear steering & crabbing for tight turns
- 12'-6" footprint
- Compact / no trailer to pull
- Automatic self-leveling system
- Whisper-quiet diesel engine
- Onboard compressor for air-driven tools
- Flow-thru bin design

Call OESCO for a demonstration! 800-634-5557
www.oescoinc.com

Supplying Growers, Gardeners and Groundskeeping Professionals. Since 1954.
OESCO INC.™
70 YEARS

P.O. Box 540
8 Ashfield Rd./Route 116
Conway, MA 01341

Eco-Friendly Insect, Disease, Bird Control

University/USDA tested

Stink Bug Traps
Brown Marmorated and Native Bugs

Insect Traps and Lures
Plum Curculio Trap Tree Control, Codling & Oriental Moth, Cranberry Pests, Black Stem Borer, Others

Honey Bee Lure
Attract Bees - Increase Pollination

Predalure *attracts beneficials*

Oriental Beetle MD
Mating Disruption
Fruit Crops & Ornamentals

Prestop
New Biofungicide Impressive Activity. Foliar/Root Diseases

Avex
Bird Control. Apply by ground or air. Cherries, Blueberries, Sweet Corn, other crops

AgBio Inc

Committed to the Environment and Green Technology Since 1990

P. 303-469-9221
agbio@agbio-inc.com
www.AgBio-Inc.com

BBB ACCREDITED BUSINESS