

Farm and Weather Summary

Nick Howell, farm superintendent

Farm Comments

Staffing and Internships. Several changes in farm staff occurred in 2007. Rich Clayton changed to a full time position with Extension. He continues as manager of the Aquatic Research Facility. Chris Blume was changed to a 25% appointment at the Horticulture Research Station. Three internships were offered at the Horticulture Station in 2007. The first intern was to develop a plan to market produce grown on the farm, the second intern was to manage crops in the High Tunnel, and the third intern was to develop a weed control program for the woody plant trials and collections at the station.

Developments. Major work was completed on the headquarters building. A new roof and insulation was installed in late April funded by the Coles Memorial Farm. The main entrance to the building was made handicap accessible, and the water tower was sand blasted and painted. Sensor cables were installed at the front gate so it opens automatically for incoming traffic.

A centralized computer database project was begun in 2007. A wireless network with six work stations was installed and a central shared file was developed. This system now provides an accessible location for all research protocols, pesticide records, and AutoCAD maps.

With the assistance of ISU Environmental Health and Safety Department, an extensive cleanup of the pesticide buildings for the farm and turf research areas was completed. A large collection of unused pesticides were disposed of and all storage areas were updated. An inventory control system for pesticides was put in place.

Landscape cleanup and renovation projects continued. Large unused shrub trials the turf research area and near the farmstead were removed using a skid loader mounted brush cutter. An old shade tree trial at the farmstead was selectively thinned and a grove was developed for plant identification classes and shade research projects. Under the direction of Ann Marie VanDerZanden, the horticulture 444 class landscaped the front of the headquarters building.

Field Days, Tours, and Class Activities. The station hosted four field days, ten tours, and ten student classes. A total of 950 people attended these events.

Weather Comments

Winter 2006–2007. Temperatures were above normal in January and below normal in February while precipitation was relatively normal. Weather conditions had no adverse effect on perennial crops.

Spring 2007. Relatively warm temperatures in March resulted in early bud swell of the apples. This later became a detriment when temperatures dipped into the lower teens the first week of April. This resulting freeze caused a virtual crop failure in the apple orchard. The flowering crab trial received similar damaged resulting in little to no bloom.

Summer 2007. The summer of 2007 was a mix of above and below normal temperatures and precipitation with relatively high humidity throughout the period. The result was high incidents of insect and disease infestations and an increased use of pesticides. Overall water use for irrigation was less than the year before.

Fall 2007. In early fall, above normal rainfall and humidity caused major damage to grape

crops. The resulting bunch rot and insect infestations caused a 40%–60% loss of marketable grape clusters. Temperatures remained above normal through the period as well, causing a delay in hardening off of perennial crops

Acknowledgements

I would like to thank the farm crew of Jim Kubik, Lynn Schroeder, Dan Crosman, and Chris Blume for their efforts during 2007. Thanks to the student interns AJ Vosika, Ryan Sturms, and Matt Heard and the other student

workers for their hard work. Thanks also to Coles Memorial Farm for funding renovations of the headquarters building. The assistance with the irrigation system maintenance provided by John Newton, superintendent, Veenker Memorial Golf Course, is appreciated. Thanks to Meg Speer and Dorian Stripling for their volunteer efforts in documenting farm history. I would also like to thank Lisa Harmison and the Story County Master Gardeners for their assistance with the Home Demonstration Garden Field Day.

Table 1. Horticulture Research Station, Ames, monthly rainfall and temperatures for 2007.

Month	Rainfall (in.)		High 2007	Temperature (°F)			Days 90° or above
	2007	Deviation from normal		Deviation from normal	Low 2007	Deviation from normal	
March	3.18	1.14	52	5.0	34	-2.0	0
April	6.01	2.51	59	-2.7	36	-2.0	0
May	6.67	2.37	78	5.0	55	5.2	0
June	2.03	-2.97	82	0.2	61	0.8	0
July	2.95	-1.45	85	-3.0	64	0.8	1
August	7.89	3.59	85	3.0	66	6.7	0
September	1.90	-1.1	80	4.0	55	2.8	5
October	<u>3.86</u>	<u>1.26</u>	62	-1.0	49	4.0	<u>1</u>
Totals	34.49	3.35					7