

The purpose of this research study is to rapidly estimate the agricultural impacts resulting from Hurricane Milton in the state of Florida. Survey results have been combined with a detailed baseline database on agricultural assets in Florida to estimate and communicate agricultural losses and damages in support of informed local, state, and federal decision-making processes related to disaster declaration, response, and relief.

Event Description

The tropical system that would eventually become Milton originated in the western Caribbean Sea and consolidated in the Bay of Campeche on October 5, 2024. Gradual intensification occurred as it slowly moved eastward, becoming a hurricane early on October 7 and undergoing explosive intensification to become a Category 5 hurricane with winds of 180 mph (285 km/h). Increasing wind shear caused the hurricane to weaken as it turned northeast towards Florida, falling to Category 3 status before making landfall near Siesta Key late on October 9. Afterwards, Milton rapidly weakened as it moved across the state into the Atlantic Ocean.

Impacted Agricultural Acreage

Over 5.7 million acres of agricultural lands were affected, of which over 68% was grazing land. Across all commodity groups, around 62% of impacted acreage experienced low-intensity weather conditions (Hurricane Composite Intensity Index [HCII] levels 1-3), 38% of impacted acreage experienced moderate-intensity weather conditions (HCII levels 4-9), and less than 1% of impacted acreage experienced high-intensity weather conditions (HCII levels 10-15). The commodity groups that were most affected (in terms of overall acreage impacted) by Hurricane Milton (not including grazing land) were Field and Row Crops (968,000+ acres, including hay and sugarcane), Citrus (274,000+ acres), and Vegetables, Melons, and Potatoes (201,000+ acres).

Production Losses

Preliminary estimates of production losses for agricultural producers in Florida associated with Hurricane Milton are between \$190.4 million and \$642.7 million. The commodity groups that were most affected in terms of production losses are Vegetables, Melons and Potatoes (\$52.5-233.2 million), Greenhouse/Nursery (\$66.9-177.3 million), and Animals and Animal Products (\$29.4-86.5 million).

Infrastructure and Production Damages

Reported damages to infrastructure include homes, livestock sheds and watering points, perennial plantings, conservation structures, honey bee boxes, fences, farm equipment, irrigation system, and aquaculture equipment (e.g., lost gear and bags). Survey respondents also reported damage to or destruction of stored agricultural inputs including fertilizer, feed, and animal medicine as well as stored harvested products including eggs, honey, meat, and food fish.

Note: These estimates are preliminary and do not include repair or replacement costs associated with damages to agricultural infrastructure, stored agricultural inputs, stored harvested products, timber production losses, or losses for commercial fisheries.



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