Introduction

When thinking about disaster assistance for honeybees, it is important to remember that bees are classified as livestock by the U.S. Department of Agriculture. Honeybees are not native to the U.S. and are cultivated by beekeepers to produce agricultural products, including honey, wax and pollination services [1]. Their classification as an agricultural species affords beekeepers access to government programs that help mitigate risk.

Beekeepers face many weather-related challenges. Unpredictable and intense weather has a detrimental effect on bee health, productivity and hive structural integrity. As an example, drought conditions reduce the availability of food sources and water. Drought affects the availability of floral feed sources, including plant height, numbers of flowers and flower color and shape, which reduces the volume and quality of nectar in those plants [2]. Water is critical for bee health but also for cooling hives in high temperatures. Drought is often accompanied by high temperatures (above 100°F), which strain bees physically as they work to keep hives cool [3]. Together, these impacts can reduce honey volume and in extreme cases, result in excessive bee deaths.

Wildfire is another example of an eligible loss condition. Wildfires can cause direct loss of hives due to fire damage. It can also reduce the bees’ ability to feed due to excess smoke in areas not in the direct path of the fire. Supplemental feeding to offset floral sources can be costly for extended periods of time. Drought and wildfire are just two examples of the weather and disease challenges that can cause damage and excessive death rates in bee colonies.

The USDA considers death rates to be excessive when they are above the historical average for that area. However, historical numbers can vary widely. In Oklahoma, 3,600 colonies were lost from April—June 2021, representing 21% of colonies [4]. The largest cause of loss was related to weather, starvation, insufficient forage, queen failure or hives being damaged or destroyed. In comparison, from April to June, 2022, 1,100 colonies were lost, representing only 6% of colonies [4]. The largest cause of loss was varroa mites, followed closely by weather-related events. Participation in the National Survey of Bee Pests and Disease can help improve understanding of the losses beekeepers face from pests and disease. Over time, better data can help improve metrics, such as those that trigger disaster assistance.

Emergency Assistance for Livestock, Honeybees and Farm-Raised Fish Program

The Emergency Assistance for Livestock, Honeybees and Farm-Raised Fish Program (ELAP) is a federal disaster program that provides indemnities for colony losses, compensation for hive losses and/or partial cost reimbursement for supplemental feeding supplies to beekeepers, who have suffered an eligible weather event or colony collapse disorder (CCD) [5]. This may include damage to a hive from a tornado, or additional feed purchases due to drought. Although ELAP can be used by many types of livestock producers, honeybee producers have been the main beneficiaries of this program due to the inclusion of colony collapse disorder (CCD), which is not covered by other programs [6]. CCD is defined by the USDA’s Agricultural Research Service (ARS) as the presence of only a few living or dead adult bees and a live queen with immature bees and honey. Although the underlying cause of CCD may not be known, the presence of honey is a differentiating factor between CCD and starvation for USDA programs. Beekeepers are eligible for ELAP indemnity payments related to feed losses, water hauling, losses due to above-average mortality and financial costs incurred from hive replacement.

a A socially disadvantaged farmer or rancher (SDFR) is a farmer or rancher who is a member of a group whose members have been subjected to racial or ethnic discrimination and in some cases racial, ethnic, or gender discrimination (CRS R46727).

b A limited resource farmer or rancher is defined as having farm sales and household income at or below the national poverty level for a family of four with two children, or less than half of the county median household income (USDA-ERS).

c A beginning farmer or rancher is someone who has been the primary manager or operator for 10 years or less.
Eligibility for drought assistance through ELAP is triggered when "any area of a county has been rated by the U.S. Drought Monitor as having a D2 intensity for at least eight consecutive weeks," at which time ELAP expands to include supplemental feed costs and water transportation if needed [7]. It is important to remember that the correct supplemental feeding ratio of sugar to water for bees is dependent on the time of year. For more information about feeding bees, visit AGEC-2002 [8]. Additionally, supplemental feeding should only occur to provide the hive with resources to maintain themselves. Supplemental feeding of sugar water should not occur when honey supers intended for human consumption are present.

Payment rates for ELAP are based on 75% of the "average fair market value" for colonies and hives. The average fair market value is based on data collected by USDA, and is published on an annual basis. The USDA definition of a colony is "a group of honey bees housed in a managed hive used for apiculture, which does not include wild or feral honeybees." The USDA definition of a hive is "a shelter constructed in accordance with good farming practices for housing a colony of honey bees, also referred to as a beehive." [9] In 2022, the fair market value was established as $105 for colonies and $210 for hives. In 2023, those numbers increased slightly to $125 for colonies and $220 for hives [10]. The standard national normal colony death rate for 2023 was set at 24.5% [10]. Honeybee producers will be compensated for 60% of feed loss and 75% of the value of lost bees [11]. Socially disadvantaged, limited resource, beginning or veteran farmers and ranchers are eligible for higher payment rates—up to 90% of the payment rate for honeybee losses [11]. Between 2018 and 2022, 95% of annual ELAP payments across the US were attributable to

![ELAP payments to honeybee producers and honeybee colony losses, 2018-22](image)

<table>
<thead>
<tr>
<th>Program year</th>
<th>U.S. dollars (millions)</th>
<th>Number of colonies (thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>60</td>
<td>450</td>
</tr>
<tr>
<td>2019</td>
<td>70</td>
<td>450</td>
</tr>
<tr>
<td>2020</td>
<td>80</td>
<td>450</td>
</tr>
<tr>
<td>2021</td>
<td>90</td>
<td>450</td>
</tr>
<tr>
<td>2022</td>
<td>100</td>
<td>450</td>
</tr>
</tbody>
</table>

Note: Before 2019, the ELAP program year was based on a fiscal year (Oct.-Sept.). As part of the 2018 Farm Bill, reporting of program expenditures was changed to a calendar-year basis for 2020 and subsequent years for consistency with other disaster assistance programs.

Source: USDA, Farm Service Agency (FSA) for ELAP payments, and USDA, National Agricultural Statistics Service (NASS) for colony loss.

Figure 1. ELAP Historical Payments for Honeybee Producers. Source: Used with permission from Abadam, V. and D.A. Yeh. 2023. “Sugar and Sweeteners Outlook.” United States Department of Agriculture, Economic Research Service, Charts of Note June 20, 2023.
As shown in Figure 1, total payments to bee producers spiked in 2019 due to severe weather, diseases, and pests followed by a multi-year reduction in the number of colonies in the U.S.

**How to Apply for Emergency Assistance**

ELAP is administered by the Farm Service Agency (www.farmers.gov). ELAP for honeybees is open for applications year round, but the notice of loss must be made within 15 days of the hive or colony loss being apparent and before Dec. 31 of the calendar year. However, if the loss is associated with a specific weather event (e.g. tornado), the 15-day notice of loss time clock starts on the date of the event. After the notice of loss has been submitted, an application of payment is submitted to the county FSA office and must be submitted before 30 days of calendar year end (Jan. 30).

**How to Learn More About ELAP for Beekeepers**

Contact your local FSA office to apply for an Emergency Assistance for Livestock, Honeybees and Farm-Raised Fish Program payment. This factsheet is designed to give you some general information before meeting with your local FSA agent. If you have any questions on the process, eligibility and limitations, contact your local Farm Service Agency office to have a discussion specific to your business.

**References**


