



# National Hemp Report

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This is a new data collection that NASS will conduct in late 2021. This document shows the type of data that NASS plans to publish from this survey.

The following tables will be generated referencing the target survey year of 2021. The initial publication date is scheduled for January 2022.

State level data will be published where it is possible, but due to disclosure and confidentiality issues the data may need to be published on a regional or national basis.

**2021 Industrial Floral Hemp Grown in the Open Production XXXXX**  
**2021 Industrial Grain Hemp Grown in the Open Production XXXXX**  
**2021 Industrial Fiber Hemp Grown in the Open Production XXXXX**  
**2021 Industrial Seed Hemp Grown in the Open Production XXXXX**

**2021 Industrial Floral Hemp Grown Under Protection Production XXXXX**  
**2021 Industrial Hemp Grown Under Protection for Transplant Production XXXXX**  
**2021 Industrial Hemp Grown Under Protection for Seed Production XXXXX**

**Industrial hemp in the open:** Planted area for the Nation for all utilizations totaled XXX thousand acres. The 2021 value of hemp production in the open for the United States totaled \$XXX million.

**Floral hemp in the open:** United States floral hemp production grown in the open for 2021 was estimated at XXX million pounds. Area harvested for floral hemp in the open in the United States was estimated at XXX thousand acres. The average yield for 2021 floral hemp in the open was estimated at XXX pounds per acre. The value of floral hemp grown in the open totaled \$XXX million.

**Grain hemp in the open:** National production of hemp grown in the open for grain totaled XXX million pounds. Area harvested for hemp grown in the open for grain in the United States was estimated at XXX thousand acres. The average yield for 2021 hemp grown in the open for grain was estimated at XXX pounds per acre. The value of hemp grown in the open for grain totaled \$XXX million.

**Fiber hemp in the open:** Hemp grown in the open for fiber was estimated at XXX million pounds. Area harvested for hemp grown in the open for fiber in the United States was estimated at XXX thousand acres. The average yield for 2021 hemp grown in the open for fiber was estimated at XXX pounds per acre. The value of hemp grown in the open for fiber totaled \$XXX million.

**Seed hemp in the open:** Production of hemp grown in the open for seed was estimated at XXX million pounds. Area harvested for hemp grown in the open for seed in the United States was estimated at XXX thousand acres. The average yield for 2021 hemp grown in the open for seed was estimated at XXX pounds per acre. The value of hemp grown in the open for seed totaled \$XXX million.

**Hemp under protection:** Hemp growers used XXX thousand square feet under protection for production. The 2021 value of hemp production under protection for the United States totaled \$XXX million.

Production of hemp under protection for transplant for the Nation for 2021 totaled XXX million clones. The value of hemp grown under protection for transplant totaled \$XXX million. United States production of floral hemp grown under protection was estimated at XXX million pounds. The value of floral hemp grown under protection totaled \$XXX million. Hemp grown under protection for seed totaled XXX million pounds. The value of hemp grown under protection for seed totaled \$XXX million.

## Industrial Hemp Grown in the Open Area Planted and Harvested

Location	Area planted	Area harvested <sup>1</sup>
	2021	2021
United States .....	(1,000 acres)	(1,000 acres)

<sup>1</sup> Utilized area harvested may not sum to total area harvested since acres may be harvested for more than one utilization.

## Industrial Floral Hemp Grown in the Open Area Harvested, Yield, Total Production, Utilized Production, and Harvested Not Sold Production

[Floral hemp includes hemp used for the extraction of essential oils from plant resin, such as CBD, CBG, CBN, or other phytocannabinoids]

Location	Area harvested	Yield per acre	Total production	Utilized production	Harvested not sold
	2021	2021	2021	2021	2021
	(1,000 acres)	(Pounds per acre)	(1,000 pounds)	(1,000 pounds)	(1,000 pounds)
United States .....					

## Industrial Floral Hemp Grown in the Open Production Under Production Contract, Price, and Value of Utilized Production

[Floral hemp includes hemp used for the extraction of essential oils from plant resin, such as CBD, CBG, CBN, or other phytocannabinoids]

Location	Utilized production under production contract	Price per pound	Value of utilized production
	2021	2021	2021
	(percent)	(dollars)	(1,000 dollars)
United States .....	.....		

## Industrial Floral Hemp Grown in the Open Dried Total Production, Utilized Production, Harvested Not Sold Production, Price, and Value of Production

[Floral hemp includes hemp used for the extraction of essential oils from plant resin, such as CBD, CBG, CBN, or other phytocannabinoids]

Location	Total dried production	Utilized dried production	Dried harvested not sold	Price per dried pound	Value of utilized dried production
	2021	2021	2021	2021	2021
	(1,000 pounds)	(1,000 pounds)	(1,000 pounds)	(dollars)	(1,000 dollars)
United States .....					

## Industrial Floral Hemp Grown in the Open Bucked Total Production, Utilized Production, Harvested Not Sold Production, Price, and Value of Production

[Floral hemp includes hemp used for the extraction of essential oils from plant resin, such as CBD, CBG, CBN, or other phytocannabinoids]

Location	Total bucked production	Utilized bucked production	Bucked harvested not sold	Price per bucked pound	Value of utilized bucked production
	2021	2021	2021	2021	2021
	(1,000 pounds)	(1,000 pounds)	(1,000 pounds)	(dollars)	(1,000 dollars)
United States .....					

## Industrial Floral Hemp Grown in the Open Hand Trimmed Total Production, Utilized Production Harvested Not Sold Production, Price, and Value of Production

[Floral hemp includes hemp used for the extraction of essential oils from plant resin, such as CBD, CBG, CBN, or other phytocannabinoids]

Location	Total trimmed production	Utilized trimmed production	Trimmed harvested not sold	Price per trimmed pound	Value of utilized trimmed production
	2021	2021	2021	2021	2021
	(1,000 pounds)	(1,000 pounds)	(1,000 pounds)	(dollars)	(1,000 dollars)
United States .....					



## Industrial Floral Hemp Grown in the Open Extracted Total Production, Utilized Production Harvested Not Sold Production, Price, and Value of Production

[Floral hemp includes hemp used for the extraction of essential oils from plant resin, such as CBD, CBG, CBN, or other phytocannabinoids]

Location	Total extracted production	Utilized extracted production	Extracted harvested not sold	Price per extracted pound	Value of utilized extracted production
	2021	2021	2021	2021	2021
	(1,000 pounds)	(1,000 pounds)	(1,000 pounds)	(dollars)	(1,000 dollars)
United States .....					

**Industrial Hemp Grown in the Open for Grain Area Harvested, Yield, Total Production, Utilized Production, and Harvested Not Sold Production**

Location	Area harvested	Yield per acre	Total production	Utilized production	Harvested not sold
	2021	2021	2021	2021	2021
	(1,000 acres)	(Pounds per acre)	(1,000 pounds)	(1,000 pounds)	(1,000 pounds)
United States .....					

**Industrial Hemp Grown in the Open for Grain, Production Under Production Contract, Price, and Value of Utilized Production**

Location	Utilized production under production contract	Price per pound	Value of utilized production
	2021	2021	2021
	(percent)	(dollars)	(1,000 dollars)
United States .....			

**Industrial Hemp Grown in the Open for Grain Dried Total Production, Utilized Production, Harvested Not Sold Production, Price, and Value of Utilized Production**

Location	Total dried production	Utilized dried production	Dried harvested not sold	Price per dried pound	Value of utilized dried production
	2021	2021	2021	2021	2021
	(1,000 pounds)	(1,000 pounds)	(1,000 pounds)	(dollars)	(1,000 dollars)
United States .....					

**Industrial Hemp Grown in the Open for Fiber Area Harvested, Yield, Total Production, Utilized Production, and Harvested Not Sold Production**

Location	Area harvested	Yield per acre	Total production	Utilized production	Harvested not sold
	2021	2021	2021	2021	2021
	(1,000 acres)	(Pounds)	(1,000 pounds)	(1,000 pounds)	(1,000 pounds)
United States .....					

**Industrial Hemp Grown in the Open for Fiber Production Under Production Contract, Price, and Value of Utilized Production**

Location	Utilized production under production contract	Price per pound	Value of utilized production
	2021	2021	2021
	(percent)	(dollars)	(1,000 dollars)
United States .....			

**Industrial Hemp Grown in the Open for Fiber Retted Total Production, Utilized Production, Harvested Not Sold Production, Price, and Value of Utilized Production**

Location	Total retted production	Utilized retted production	Retted harvested not sold	Price per retted pound	Value of utilized retted production
	2021	2021	2021	2021	2021
	(1,000 pounds)	(1,000 pounds)	(1,000 pounds)	(dollars)	(1,000 dollars)
United States .....					

**Industrial Hemp Grown in the Open for Seed Area Harvested, Yield, Total Production, Utilized Production, and Harvested Not Sold Production**

Location	Area harvested	Yield per acre	Total production	Utilized production	Harvested not sold
	2021	2021	2021	2021	2021
	(1,000 acres)	(Pounds per acre)	(1,000 pounds)	(dollars)	(1,000 dollars)
United States .....					



**Industrial Hemp Grown in the Open for Seed Production Under Production Contract, Price, and Value of Utilized Production**

Location	Utilized production under production contract	Price per pound	Value of utilized production
	2021	2021	2021
	(percent)	(dollars)	(1,000 dollars)
United States .....			

**Industrial Hemp Grown in the Open for Feminized Seed Total Production, Utilized Production, Harvested Not Sold Production, Price, and Value of Utilized Production**

Location	Total feminized production	Utilized feminized production	Feminized harvested not sold	Price per feminized pound	Value of utilized feminized production
	2021	2021	2021	2021	2021
	(1,000 pounds)	(1,000 pounds)	(1,000 pounds)	(dollars)	(1,000 dollars)
United States .....					

**Industrial Hemp Grown in the Open for Non-Feminized Seed Total Production, Utilized Production, Harvested Not Sold Production, Price, and Value of Utilized Production**

Location	Total non-feminized production	Utilized non-feminized production	Non-feminized harvested not sold	Price per non-feminized pound	Value of utilized non-feminized production
	2021	2021	2021	2021	2021
	(1,000 pounds)	(1,000 pounds)	(1,000 pounds)	(dollars)	(1,000 dollars)
United States .....					

## Industrial Hemp Grown Under Protection Area in Production

Location	Area in production
	2021
United States .....	(1,000 square feet)

**Industrial Hemp Grown Under Protection for Clones or Transplants Total Production, Utilized Production, Harvested Not Sold Production, Production Under Production Contract, Price, and Value**

Location	Total production	Utilized production	Harvested not sold	Utilized production under production contract	Price per pound	Value of production
	2021	2021	2021	2021	2021	2021
United States .....	(1,000 plants)	(1,000 plants)	(1,000 plants)	(percent)	(dollars)	(1,000 dollars)

**Industrial Floral Hemp Grown Under Protection Total Production, Utilized Production, Harvested Not Sold Production, Production Under Production Contract, Price, and Value**

[Floral hemp includes hemp used for the extraction of essential oils from plant resin, such as CBD, CBG, CBN, or other phytocannabinoids]

Location	Total production	Utilized production	Harvested not sold	Utilized production under production contract	Price per pound	Value of production
	2021	2021	2021	2021	2021	2021
	(1,000 pounds)	(1,000 pounds)	(1,000 pounds)	(percent)	(dollars)	(1,000 dollars)
United States .....						

## Industrial Floral Hemp Grown Under Protection Dried Total Production, Utilized Production, Harvested Not Sold Production, Price, and Value of Production

[Floral hemp includes hemp used for the extraction of essential oils from plant resin, such as CBD, CBG, CBN, or other phytocannabinoids]

Location	Total dried production	Utilized dried production	Dried harvested not sold	Price per dried pound	Value of utilized dried production
	2021	2021	2021	2021	2021
	(1,000 pounds)	(1,000 pounds)	(1,000 pounds)	(dollars)	(1,000 dollars)
United States .....					

**Industrial Floral Hemp Grown Under Protection Bucked Total Production, Utilized Production, Harvested Not Sold Production, Price, and Value of Production**

[Floral hemp includes hemp used for the extraction of essential oils from plant resin, such as CBD, CBG, CBN, or other phytocannabinoids]

Location	Total bucked production	Utilized bucked production	Bucked harvested not sold	Price per bucked pound	Value of utilized bucked production
	2021	2021	2021	2021	2021
	(1,000 pounds)	(1,000 pounds)	(1,000 pounds)	(dollars)	(1,000 dollars)
United States .....					



## Industrial Floral Hemp Grown Under Protection Hand Trimmed Total Production, Utilized Production Harvested Not Sold Production, Price, and Value of Production

[Floral hemp includes hemp used for the extraction of essential oils from plant resin, such as CBD, CBG, CBN, or other phytocannabinoids]

Location	Total trimmed production	Utilized trimmed production	Trimmed harvested not sold	Price per trimmed pound	Value of utilized trimmed production
	2021	2021	2021	2021	2021
	(1,000 pounds)	(1,000 pounds)	(1,000 pounds)	(dollars)	(1,000 dollars)
United States .....					

**Industrial Floral Hemp Grown Under Protection Extracted Total Production, Utilized Production  
Harvested Not Sold Production, Price, and Value of Production**

[Floral hemp includes hemp used for the extraction of essential oils from plant resin, such as CBD, CBG, CBN, or other phytocannabinoids]

Location	Total extracted production 2021	Utilized extracted production 2021	Extracted harvested not sold 2021	Price per extracted pound 2021	Value of utilized extracted production 2021
United States .....	(1,000 pounds)	(1,000 pounds)	(1,000 pounds)	(dollars)	(1,000 dollars)

**Industrial Hemp Grown Under Protection for Seed Total Production, Utilized Production, Harvested Not Sold Production, Production Under Production Contract, Price, and Value**

Location	Total production	Utilized production	Harvested not sold	Utilized production under production contract	Price per pound	Value of production
	2021	2021	2021	2021	2021	2021
	(1,000 pounds)	(1,000 pounds)	(1,000 pounds)	(percent)	(dollars)	(1,000 dollars)
United States .....						

**Industrial Hemp Grown Under Protection for Feminized Seed Total Production, Utilized Production, Harvested Not Sold Production, Price, and Value of Utilized Production**

Location	Total feminized production	Utilized feminized production	Feminized harvested not sold	Price per feminized pound	Value of utilized feminized production
	2021	2021	2021	2021	2021
	(1,000 pounds)	(1,000 pounds)	(1,000 pounds)	(dollars)	(1,000 dollars)
United States .....					

**Industrial Hemp Grown Under Protection for Non-Feminized Seed Total Production, Utilized Production, Harvested Not Sold Production, Price, and Value of Utilized Production**

Location	Total non-feminized production	Utilized non-feminized production	Non-feminized harvested not sold	Price per non-feminized pound	Value of utilized non-feminized production
	2021	2021	2021	2021	2021
	(1,000 pounds)	(1,000 pounds)	(1,000 pounds)	(dollars)	(1,000 dollars)
United States .....					

# Industrial Hemp Producer Characteristics– United States: 2021

Characteristics	Operators
	2021
	(Percent)
Sex of operations:	
Male.....	
Female.....	
Primary occupation:	
Farming.....	
Other.....	
Years operating any farm:	
5 years or less.....	
6 to 10 years.....	
11 years or more.....	
Age group:	
Under 25 years.....	
25 to 34 years.....	
35 to 44 years.....	
45 to 54 years.....	
55 to 64 years.....	
65 to 74 years.....	
75 years and over.....	
Average age.....	
Producers of Hispanic, Latino, or Spanish origin.....	
Producers by race:	
American Indian or Alaska Native.....	
Asian.....	
Black or African American.....	
Native Hawaiian or other Pacific Islander.....	
White.....	
More than one race reported.....	

## Definitions of Terms

**Bucking:** Bucking uses a machine to remove the hemp flower and buds from the stalks and stems.

**Extracting:** Extracting is a process that draws essential oils from raw floral hemp material.

**Feminized seed:** Feminized seeds are seeds that have been modified to produce female plants.

**Floral hemp:** Hemp used for the extraction of essential oils from plant resin, such as CBD, CBG, CBN, or other phytocannabinoids. Floral hemp includes smokeable hemp.

**Hand trimming:** Trimming hemp buds removes the leaves around the buds from the flowers.

**Harvested not sold:** The difference between total production and utilized production. This is hemp that was harvested from the field, but was not sold for various reasons including but not limited to poor quality, market conditions, marketing restrictions, or other reasons. Hemp destroyed due to high levels of THC is not considered harvested.

**Non-feminized seed:** Non-feminized seeds produce both male and female plants.

**Production contract:** An agreement setting terms, conditions, and fees to be paid by the contractor to operations for the production of hemp.

**Retting:** Retting is a process involving the use of moisture and microbes to break down the chemical bonds (pectin) holding the hemp stem together, enabling easier separation of the bast from the woody core (the hurd or shiv).

**Total production:** The quantity of a crop that was actually harvested and left the field.

**Utilized production:** The amount of a crop sold, the quantities used at home to make processed items, or held in storage. It is the difference between total production and harvested not sold.

**Yield per acre:** Total production divided by area harvested.

## Statistical Methodology

**Survey Procedures:** Grower surveys are conducted in all fifty estimating States to collect acreage, production, and price data from growers.

**Estimating Procedures:** Information obtained from the hemp growers surveys are used to establish estimates of hemp. These estimates are reviewed for errors, reasonableness, and consistency with historical estimates and industry check data.

**Revision Policy:** All hemp estimates are subject to revision the following year based on a thorough review of all available data.

**Reliability:** Survey results are subject to non-sampling errors such as omission, duplication, imputation for missing data, and mistakes in reporting, recording, and processing the data. These errors cannot be measured directly, but are minimized through rigid quality controls in the data collection process and a careful review of all reported data for consistency and reasonableness.

## Information Contacts

Listed below are the commodity statisticians in the Crops Branch of the National Agricultural Statistics Service to contact for additional information. E-mail inquiries may be sent to [nass@usda.gov](mailto:nass@usda.gov)

Lance Honig, Chief, Crops Branch.....	(202) 720-2127
Chris Hawthorn, Head, Field Crops Section.....	(202) 720-2127
Irwin Anolik – Crop Weather.....	(202) 720-7621
Joshua Bates – Oats, Soybeans.....	(202) 690-3234
David Colwell – Current Agricultural Industrial Reports.....	(202) 720-8800
Becky Sommer – Cotton, Cotton Ginnings, Sorghum.....	(202) 720-5944
James Johanson – Barley, County Estimates, Hay.....	(202) 690-8533
Greg Lemmons – Corn, Flaxseed, Proso Millet.....	(202) 720-9526
Jean Porter – Rye, Wheat.....	(202) 720-8068
John Stephens – Peanuts, Rice.....	(202) 720-7688
Travis Thorson – Sunflower, Other Oilseeds.....	(202) 720-7369



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- Cornell’s Mann Library has launched a new website housing NASS’s and other agency’s archived reports. The new website, <https://usda.library.cornell.edu>. All email subscriptions containing reports will be sent from the new website, <https://usda.library.cornell.edu>. To continue receiving the reports via e-mail, you will have to go to the new website, create a new account and re-subscribe to the reports. If you need instructions to set up an account or subscribe, they are located at: <https://usda.library.cornell.edu/help>. You should whitelist [notifications@usda-esmis.library.cornell.edu](mailto:notifications@usda-esmis.library.cornell.edu) in your email client to avoid the emails going into spam/junk folders.

For more information on NASS surveys and reports, call the NASS Agricultural Statistics Hotline at (800) 727-9540, 7:30 a.m. to 4:00 p.m. ET, or e-mail: [nass@usda.gov](mailto:nass@usda.gov).

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