

~ 2015 ~

# U.S. Sunflower Crop Quality Report



## *Regarding the 2015 Sunflower Crop Quality Report . . .*

The 2015 U.S. Sunflower Crop Quality Report, compiled by the National Sunflower Association in cooperation with the Foreign Agricultural Service, U.S. Department of Agriculture, provides an overview on the size and quality of the 2015 U.S. sunflower seed crop. It includes statistics on the marketing of the crop, as well as U.S. and world supply/disappearance tables and information on U.S. sunflower oil.

Produced annually by the National Sunflower Association since 1981, this newest U.S. Sunflower Crop Quality Report can be found on the NSA's website. Address: [www.sunflowernsa.com](http://www.sunflowernsa.com). Printed copies of this report can be made available by the NSA. (See NSA's contact details on page 9).

## — Table of Contents —

|  |   |
|--|---|
| Regarding the 2015 Report . . . . .                          | 2 |
| 2015 Acreage & Production . . . . .                          | 3 |
| Seed Quality / Confection Kernel Specifications . . . . .    | 4 |
| Oil Quality Analysis / Oil Traits & Rules . . . . .          | 5 |
| Sun Oil & Sun Meal Exports . . . . .                         | 6 |
| U.S. Supply & Disappearance . . . . .                        | 7 |
| World Supply & Disappearance . . . . .                       | 8 |
| About the National Sunflower Association / Contact . . . . . | 9 |



## 2015 U.S. Sunflower Acreage & Production

United States sunflower production totaled 2.92 billion pounds in 2015, up nearly 32% from the 2014 crop's size and almost 45% larger than the 2013 crop.

The U.S. average yield per acre — at 1,625 pounds — was nearly 11% higher than 2014's 1,469-pound average and almost 18% more than in 2013.

Planted area, at 1.86 million acres, was up almost 19% from 2014. Area harvested in 2015 was 1.8 million acres.

For the third straight year, South Dakota was the nation's leading sunflower-producing state. South Dakota producers harvested 1.23 billion pounds of sunflower in 2015, compared to about 1.07 billion pounds in North Dakota.

U.S. production of oil-type sunflower varieties in 2015, at 2.38 billion pounds, was up substantially from 2014's 1.66 billion. Harvested acreage of oil types was up almost 33% from the prior year.

At 1,579 pounds per acre, the average yield of 2015 oil sunflower fields was more than 8% above 2014's 1,460-pound level and almost 16% above 2013's 1,363-pound average yield.

The 2015 U.S. production of nonoil sunflower varieties — at just under 540.0 million pounds — was nearly 3% less than 2014's nonoil output. Average nonoil yield in 2015 — 1,865 pounds — was, however, 368 pounds above the 2014 average. Harvested nonoil acreage was 22% lower than 2014.



### U.S. Sunflower Production

(1,000s of Pounds)

|              | 2012             | 2013             | 2014             | 2015             |
|--------------|------------------|------------------|------------------|------------------|
| Oil          | 2,399,910        | 1,646,805        | 1,664,090        | 2,383,870        |
| Nonoil       | 385,785          | 385,920          | 554,960          | 539,860          |
| <b>Total</b> | <b>2,785,695</b> | <b>2,032,725</b> | <b>2,219,050</b> | <b>2,923,730</b> |

### U.S. Oil-Type Sunflower Harvested Area, By State

(1,000s of Hectares)

| State        | 2008         | 2009         | 2010         | 2011         | 2012         | 2013         | 2014         | 2015         |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Colorado     | 57.9         | 27.5         | 37.2         | 39.3         | 24.7         | 15.8         | 13.0         | 23.1         |
| Kansas       | 83.0         | 56.7         | 42.5         | 42.5         | 26.3         | 20.2         | 17.0         | 21.4         |
| Minnesota    | 29.5         | 17.8         | 20.6         | 10.9         | 15.0         | 13.0         | 18.2         | 30.4         |
| Nebraska     | 17.4         | 10.5         | 9.7          | 14.2         | 11.9         | 10.3         | 10.1         | 10.9         |
| North Dakota | 376.4        | 307.6        | 277.2        | 202.3        | 305.5        | 163.9        | 206.4        | 244.8        |
| South Dakota | 220.6        | 206.4        | 161.9        | 163.1        | 226.6        | 218.5        | 161.9        | 230.7        |
| Texas        | 21.9         | 23.9         | 11.3         | 9.3          | 13.4         | 24.3         | 16.2         | 35.2         |
| Other        | 27.9         | 18.6         | 15.1         | 17.6         | 20.8         | 23.6         | 18.3         | 14.6         |
| <b>Total</b> | <b>834.6</b> | <b>669.0</b> | <b>575.5</b> | <b>499.2</b> | <b>644.2</b> | <b>489.6</b> | <b>461.1</b> | <b>611.1</b> |

# 2015 U.S. Sunflower Crop Quality Report

## 2015 Seed Quality/Confection Kernel Specifications

Seed quality and kernel specifications of the 2015 crop were estimated from samples of oil and nonoil (confection) sunflower collected with the aid of the North Dakota Grain Inspection Service, Kansas Grain Inspection Service, Aberdeen (S.D.) Grain Inspection and several confection sunflower processing plants. The samples were drawn from sunflower loads delivered to processors, or from submitted samples taken at local grain buying facilities. The seed samples were then analyzed according to USDA Grain Inspection, Packers &

Stockyards Administration (GIPSA, formerly known as FGIS) directives. Oil content of oil-type seed samples was determined on a clean-seed basis using nuclear magnetic resonance (NMR) analysis.

Analysis of the oil-type sunflower seed samples indicated an average oil content of 42.5%, up from the 2014 average of 41.5%. Test weight averaged 31.0 pounds per bushel — up 0.9 pound from that of the 2014 samples. Foreign material, at 5.4%, was lower than the 2014 average of 5.6%. Moisture, at 8.6%, was identical to the average of the 2014 samples.

The percentage of confection (nonoil) seeds over 20/64 in size averaged 84.8% among the 2015 samples, compared to the 2014 average of 79.7%.

Foreign material in the nonoils averaged 12.8% in 2015, which was 1.2%

above the 2014 average. At 20.6 pounds per bushel, average 2015 nonoil test weight was 0.4 pound lower than that of the 2014 samples. At 9.7%, moisture was 0.4% above the 2014 nonoil crop's average.

### Oil-Type Sunflower Seed Quality

| Year | Test Weight<br>(Lbs/Bu) | Moisture<br>(%) | Foreign Material<br>(%) | Oil<br>(%) |
|------|-------------------------|-----------------|-------------------------|------------|
| 2015 | 31.0                    | 8.6             | 5.4                     | 42.5       |
| 2014 | 30.1                    | 8.6             | 5.6                     | 41.5       |
| 2013 | 30.1                    | 10.0            | 5.0                     | 41.9       |
| 2012 | 30.4                    | 9.3             | 5.1                     | 41.6       |
| 2011 | 28.8                    | 9.6             | 4.4                     | 41.4       |

### Nonoil Sunflower Seed Quality

| Year | Test Weight<br>(Lbs/Bu) | Moisture<br>(%) | Foreign Material<br>(%) | Seeds Over<br>20/64 Size<br>(%) |
|------|-------------------------|-----------------|-------------------------|---------------------------------|
| 2015 | 20.6                    | 9.7             | 12.8                    | 84.8                            |
| 2014 | 21.0                    | 9.3             | 11.6                    | 79.7                            |
| 2013 | 22.0                    | 11.6            | 7.3                     | 85.4                            |
| 2012 | 22.4                    | 10.4            | 7.9                     | 84.1                            |
| 2011 | 21.2                    | 10.6            | 8.7                     | 84.3                            |

### Product Specifications U.S. Sunflower Kernel

- Origin** - Sunflower hybrid seed
  - Flavor** - Good, typical, mild, distinctive
  - Odor** - Good, clean, fresh aroma
  - Texture** - Firm, not brittle or soggy
  - Color** - Off-white, gray
  - Microbiological** - Aflatoxin: Negative  
Pathogens: Negative
  - Chemical Additives** - No preservatives or chemical additives may be used
  - Pesticide Residues** - Meets all state & federal regulatory requirements
  - Fumigants** - Only FDA-approved fumigants may be used as considered necessary. Residues may not exceed FDA approved tolerances
- Quality and type of kernel is determined with the following factors to meet specific customer needs:**
- Size** - Defined as kernel count per oz
  - Foreign Material** - Includes shells and unshelled seed; defined as percentage or count per unit of weight
  - Moisture** - Defined as a percentage at or below 8%
  - Damage** - Distinctly discolored kernel or insect damage. Each defined as a percentage
  - Broken or Chip** - Any portion less than 1/2 kernel; defined as a percentage
  - Sticktites** - Kernel with a piece of shell adhering; defined as count per unit of weight.

## 2015 Oil Quality Analysis/Oil Traits & Rules

The tables below compare the oil quality and fatty acid content of representative samples of high-oleic and mid-oleic sunflower seed oil, gathered from the 2015 U.S. crop, to previous years' data on oil quality. The sunflower oil quality analysis was conducted with standard gas chromatography, basis American Oil Chemists' Society Method #Cel-62.

The 63.77% oleic average of the 2015 NuSun® (mid-oleic) samples was lower than 2014's 67.23%, and, as well, the 66.17% average of 2013.

The 2015 high-oleic seed samples averaged an oleic acid content of

84.23%. That compares to an 85.52% average of the 2014 high-oleic seed samples and 85.87% in 2013.

As is the case each year, climatic factors and timing of production contributed to the fatty acid levels of both the NuSun and high-oleic samples collected at harvest.

See general trading rules for mid-oleic and high-oleic oil, as well as product specification tables, at [www.sunflowernsa.com](http://www.sunflowernsa.com).

Click on the link "Sunflower oil," then "product specifications." For more details or questions regarding trading rules, go to the American Fats & Oils Assn., Inc., website, [afoaonline.org](http://afoaonline.org).

### Sunflower Oil Quality / High Oleic

Percent

| Year | Palmitic<br>16:0 | Stearic<br>18:0 | Oleic<br>18:1 | Linoleic<br>18:2 | Linolenic<br>18:3 |
|------|------------------|-----------------|---------------|------------------|-------------------|
| 2015 | 3.47             | 3.20            | 84.23         | 6.70             | 0.27              |
| 2014 | 3.62             | 3.09            | 85.52         | 5.38             | 0.30              |
| 2013 | 3.72             | 3.29            | 85.87         | 4.96             | 0.18              |
| 2012 | 3.54             | 3.18            | 84.80         | 6.30             | 0.23              |
| 2011 | 3.34             | 3.15            | 85.06         | 6.46             | 0.26              |

### Sunflower Oil Quality / NuSun®

Percent

| Year | Palmitic<br>16:0 | Stearic<br>18:0 | Oleic<br>18:1 | Linoleic<br>18:2 | Linolenic<br>18:3 |
|------|------------------|-----------------|---------------|------------------|-------------------|
| 2015 | 4.25             | 3.56            | 63.77         | 26.02            | 0.36              |
| 2014 | 4.14             | 3.20            | 67.23         | 22.98            | 0.43              |
| 2013 | 4.41             | 3.72            | 66.17         | 23.44            | 0.28              |
| 2012 | 4.43             | 3.74            | 62.90         | 26.56            | 0.40              |
| 2011 | 4.44             | 3.47            | 62.42         | 27.67            | 0.35              |

#### Mid-Oleic Sunflower Oil (NuSun®): Crude

Trading Rules: Specifications from American Fats and Oils Association: Rule 14B

| ITEM  | VALUE                      |
|---|----------------------------|
| Flash Point (AOCS Cc 9b-56)   | 250°F Minimum              |
| Halphen Test  | Negative                   |
| Saponification Value  | 188-194                    |
| Unsaponifiable  | 1.3% Maximum               |
| Free Fatty Acid (as Oleic)  | Basis 2.0%<br>Maximum 3.0% |
| Moisture & Volatile (AOCS Ca 2d-25)   | 0.5% Maximum               |
| Insoluble Impurities (AOCS Ca 3-46)   | 0.3% Maximum               |
| Color (in 5 1/4 inch cell or tube), as determined under AOCS Method Cc 13b-45, Bleached (AOCS Cc 8g-52), after refining (AOCS Ca 9a-52) | 2.5 Red Maximum            |
| Linolenic acid  | 1.0% Maximum               |
| Oleic (as % of TFA)   | 55% Minimum<br>75% Maximum |

Rule 14B -- Crude mid-oleic sunflower oil (NuSun®) shall be pure and produced only from sunflower seed of fair average quality by hydraulic, expeller, or solvent extraction process. Buyer shall receive an allowance of 0.1% of the invoice value for each 0.1% of free fatty acid in excess of 2%; fractions in proportion. (Effective 1/1/2003)

#### Mid-Oleic Sunflower Oil (NuSun®): Fully Refined, Bleached & Deodorized

Trading Rules: Specifications from American Fats and Oils Association: Rule 15B

| ITEM                                  | VALUE                              |
|---------------------------------------|------------------------------------|
| Free Fatty Acid (as Oleic)            | 0.05% Maximum                      |
| Moisture & Impurities (AOCS Ca 2d-25) | 0.10% Maximum                      |
| Peroxide Value                        | 2.0 Maximum                        |
| Color (Lovibond Scale)                | 2.5 Red Maximum                    |
| Iodine Value                          | 88-115.0                           |
| Oleic                                 | 55% Minimum<br>75% Maximum         |
| Flavor                                | Pleasing                           |
| Appearances (Waxes Not Separated)     | Will be cloudy at room temperature |

#### Other Possible Specs:

|                                    |              |
|------------------------------------|--------------|
| Saponification Value               | 186-194      |
| Unsaponifiable                     | 1.5% Maximum |
| Specific Gravity by 20° Centigrade | 0.917-0.924  |

Rule 15B -- Fully refined, bleached and deodorized mid-oleic sunflower oil (NuSun®) shall be pure mid-oleic sunflower seed oil. It shall be produced from fair average quality crude mid-oleic sunflower seed oil from which essentially all of the free fatty acids and non-oil substances have been removed by chemical treatments and by mechanical or physical separation. (Effective 1/1/2003)

## 2015 Sunflower Oil & Sunflower Meal Exports

**Oil Exports** - Sunflower oil is the preferred oil in most of Europe, Russia and Mexico, as well as in countries along the Mediterranean and several South American nations.

U.S. sunflower oil exporters can deliver three types of sunflower oil: NuSun®, Linoleic and High Oleic.

- **NuSun®** is a mid-range oleic, 55%-75% (monounsaturated) sun-

flower oil. It needs no hydrogenation and has a 9% saturated fat level. NuSun® is extremely functional for frying applications and has a good balance of linoleic acid — an essential fatty acid that enhances products' taste.

- **Linoleic** sunflower oil has about 69% polyunsaturated fat, 20% monounsaturated fat and 11% saturated fat. Linoleic sunflower is an excellent cooking oil with a neutral taste. This enhances the taste of food rather than overpowering it.

- **High-Oleic** sun-

flower oil has 80% or more oleic (monounsaturated) acid. This unique oil has many specialty applications.

**Sun Meal Exports** - Most of U.S. sunflower meal produced is utilized within the United States as an ingredient for the domestic livestock feeding industry, although some U.S. sunflower meal is exported. Four types of sun meal, identified by their respective protein contents (28, 30, 32 and 35%), are produced in the United States.

### U.S. Sunflower Oil Exports

(October-September, in Metric Tons)

| Country         | 2011/12       | 2012/13       | 2013/14       | 2014/15       |
|-----------------|---------------|---------------|---------------|---------------|
| Australia       | 32            | 211           | 910           | 148           |
| Canada          | 13,995        | 15,178        | 16,652        | 18,944        |
| Costa Rica      | 277           | 413           | 519           | 191           |
| Germany         | 5             | 2             | 2,000         | 0             |
| Japan           | 999           | 1,106         | 2,575         | 4,384         |
| Mexico          | 478           | 8,343         | 4,654         | 3,326         |
| Netherlands     | 7             | 1             | 2,445         | 178           |
| Singapore       | 32            | 312           | 146           | 33            |
| South Korea     | 36            | 998           | 900           | 63            |
| Taiwan          | 174           | 313           | 45            | 515           |
| United Kingdom  | 0             | 4             | 4,094         | 0             |
| Vietnam         | 377           | 1,029         | 1,390         | 388           |
| Other           | 2,796         | 1,421         | 854           | 775           |
| <b>Total MT</b> | <b>19,208</b> | <b>29,331</b> | <b>37,184</b> | <b>28,945</b> |

### U.S. Sunflower Meal Exports

(October-September, in Metric Tons)

| Country         | 2011/12      | 2012/13       | 2013/14      | 2014/15      |
|-----------------|--------------|---------------|--------------|--------------|
| Canada          | 3,051        | 5,112         | 4,328        | 4,370        |
| Germany         | 0            | 0             | 1,036        | 0            |
| Israel          | 0            | 14,057        | 0            | 0            |
| Indonesia       | 0            | 0             | 76           | 2,750        |
| Mexico          | 204          | 18            | 0            | 0            |
| Romania         | 0            | 0             | 2,012        | 0            |
| Other           | 2            | 71            | 261          | 312          |
| <b>Total MT</b> | <b>3,257</b> | <b>19,258</b> | <b>7,713</b> | <b>7,432</b> |



# 2015 U.S. Sunflower Crop Quality Report

7

## U.S. Sunflower Supply & Disappearance *(in 1,000 Metric Tons, Unless Specified)*

| Item                                  | 2010/11<br>Oct.-Sept. | 2011/12    | 2012/13      | 2013/14    | 2014/15<br>Revised | 2015/16<br>Forecast |
|---------------------------------------|-----------------------|------------|--------------|------------|--------------------|---------------------|
| <b>NONOIL SUNFLOWER</b>               |                       |            |              |            |                    |                     |
| Area Harvested (1,000 HA)             | 183                   | 91         | 101          | 107        | 150                | 117                 |
| Area Harvested (1,000 AC)             | 451                   | 224        | 249          | 264        | 371                | 289                 |
| Yield (MT/HA)                         | 1.64                  | 1.58       | 1.74         | 1.63       | 1.68               | 2.09                |
| Yield (LB/AC)                         | 1,465                 | 1,406      | 1,548        | 1,458      | 1,497              | 1,865               |
| Stocks, Oct. 1                        | 18                    | 50         | 28           | 23         | 31                 | 72                  |
| Production                            | 300                   | 143        | 175          | 174        | 252                | 245                 |
| Seed Import                           | 28                    | 28         | 25           | 28         | 37                 | 30                  |
| <b>TOTAL SUPPLY</b>                   | <b>346</b>            | <b>221</b> | <b>228</b>   | <b>226</b> | <b>320</b>         | <b>346</b>          |
| Disappearance                         | 296                   | 193        | 205          | 195        | 248                | 275                 |
| Ending Stocks                         | 50                    | 28         | 23           | 31         | 72                 | 71                  |
| <b>OIL SUNFLOWER</b>                  |                       |            |              |            |                    |                     |
| Area Harvested (1,000 HA)             | 576                   | 499        | 644          | 486        | 461                | 611                 |
| Area Harvested (1,000 AC)             | 1,423                 | 1,233      | 1,592        | 1,201      | 1,140              | 1,510               |
| Yield (MT/HA)                         | 1.63                  | 1.57       | 1.69         | 1.53       | 1.64               | 1.77                |
| Yield (LB/AC)                         | 1,458                 | 1,397      | 1,508        | 1,363      | 1,460              | 1,579               |
| Stocks, Oct. 1                        | 126                   | 38         | 30           | 165        | 15                 | 34                  |
| Production                            | 941                   | 782        | 1,089        | 743        | 755                | 1,082               |
| Seed Import                           | 15                    | 15         | 25           | 27         | 23                 | 25                  |
| <b>TOTAL SUPPLY</b>                   | <b>1,082</b>          | <b>835</b> | <b>1,144</b> | <b>935</b> | <b>793</b>         | <b>1,140</b>        |
| Oilseed Crushed                       | 526                   | 355        | 467          | 470        | 351                | 525                 |
| Planting Seed, Birdfood, Domestic Use | 490                   | 420        | 478          | 420        | 375                | 450                 |
| Exports                               | 28                    | 29         | 34           | 30         | 33                 | 30                  |
| Disappearance                         | 1,044                 | 804        | 979          | 920        | 759                | 1,005               |
| Ending Stocks                         | 38                    | 31         | 165          | 15         | 34                 | 135                 |
| <b>SUNFLOWER OIL</b>                  |                       |            |              |            |                    |                     |
| Stocks, Oct. 1                        | 37                    | 25         | 17           | 19         | 17                 | 20                  |
| Oil Imports                           | 47                    | 74         | 33           | 35         | 80                 | 35                  |
| Oil Production                        | 216                   | 146        | 194          | 195        | 146                | 218                 |
| <b>TOTAL SUPPLY</b>                   | <b>300</b>            | <b>244</b> | <b>244</b>   | <b>249</b> | <b>243</b>         | <b>273</b>          |
| Domestic Oil Use                      | 237                   | 208        | 196          | 195        | 194                | 219                 |
| Oil Exports                           | 38                    | 19         | 29           | 37         | 29                 | 30                  |
| Total Use                             | 275                   | 227        | 225          | 232        | 223                | 249                 |
| Ending Stocks                         | 25                    | 17         | 19           | 17         | 20                 | 24                  |
| <b>SUNFLOWER MEAL</b>                 |                       |            |              |            |                    |                     |
| Stocks, Oct. 1                        | 6                     | 4          | 2            | 2          | 4                  | 3                   |
| Production                            | 268                   | 181        | 238          | 240        | 179                | 268                 |
| <b>TOTAL SUPPLY</b>                   | <b>274</b>            | <b>185</b> | <b>240</b>   | <b>242</b> | <b>183</b>         | <b>271</b>          |
| Domestic Use                          | 267                   | 179        | 219          | 230        | 173                | 260                 |
| Exports                               | 3                     | 3          | 19           | 8          | 7                  | 8                   |
| Total Use                             | 270                   | 182        | 238          | 238        | 180                | 268                 |
| Ending Stocks                         | 4                     | 3          | 2            | 4          | 3                  | 3                   |

# 2015 U.S. Sunflower Crop Quality Report

## World Sunflower Supply & Disappearance

Sources:  
Oil World & USDA

| Item                             | 2010/11       | 2011/12       | 2012/13       | 2013/14       | 2014/15<br><i>Revised</i> | 2015/16<br><i>Forecast</i> |
|----------------------------------|---------------|---------------|---------------|---------------|---------------------------|----------------------------|
| <b>Area Harvested (1,000 HA)</b> | <b>23,923</b> | <b>25,856</b> | <b>25,470</b> | <b>25,730</b> | <b>24,447</b>             | <b>24,755</b>              |
| <b>Yield (MT/HA)</b>             | <b>1.40</b>   | <b>1.53</b>   | <b>1.40</b>   | <b>1.68</b>   | <b>1.67</b>               | <b>1.67</b>                |
| <b>SUNFLOWER SEED —</b>          |               |               |               |               |                           |                            |
| <b>Production</b>                |               |               |               |               |                           |                            |
| Argentina                        | 3,665         | 3,775         | 2,850         | 2,250         | 2,800                     | 3,000                      |
| European Union                   | 6,975         | 8,323         | 7,018         | 9,105         | 8,879                     | 7,758                      |
| China                            | 1,710         | 1,700         | 1,730         | 2,423         | 2,380                     | 2,350                      |
| Russia                           | 5,820         | 9,500         | 8,000         | 10,200        | 9,100                     | 9,600                      |
| Ukraine                          | 8,000         | 9,500         | 8,387         | 10,941        | 10,000                    | 11,200                     |
| United States                    | 1,241         | 925           | 1,264         | 917           | 1,005                     | 1,326                      |
| India                            | 650           | 620           | 615           | 580           | 390                       | 360                        |
| Turkey                           | 1,020         | 940           | 1,100         | 1,450         | 1,200                     | 1,150                      |
| Other                            | 4,113         | 4,226         | 4,783         | 5,471         | 4,972                     | 4,708                      |
| <b>TOTAL</b>                     | <b>33,572</b> | <b>39,509</b> | <b>35,747</b> | <b>43,337</b> | <b>40,726</b>             | <b>41,452</b>              |
| <b>Seed Import</b>               |               |               |               |               |                           |                            |
| Turkey                           | 719           | 844           | 627           | 581           | 447                       | 400                        |
| European Union                   | 393           | 291           | 220           | 329           | 275                       | 290                        |
| Other                            | 620           | 830           | 638           | 1,050         | 1,059                     | 843                        |
| <b>TOTAL</b>                     | <b>1,732</b>  | <b>1,965</b>  | <b>1,485</b>  | <b>1,960</b>  | <b>1,781</b>              | <b>1,533</b>               |
| <b>Seed Exports</b>              |               |               |               |               |                           |                            |
| Argentina                        | 70            | 83            | 85            | 80            | 68                        | 80                         |
| United States                    | 144           | 114           | 144           | 132           | 126                       | 135                        |
| Russia                           | 13            | 402           | 59            | 131           | 61                        | 50                         |
| Ukraine                          | 446           | 284           | 124           | 71            | 123                       | 160                        |
| Other                            | 1,083         | 1,097         | 1,128         | 1,536         | 1,394                     | 1,107                      |
| <b>TOTAL</b>                     | <b>1,756</b>  | <b>1,980</b>  | <b>1,540</b>  | <b>1,950</b>  | <b>1,772</b>              | <b>1,532</b>               |
| <b>Oilseed Crushed</b>           | <b>30,034</b> | <b>36,145</b> | <b>32,355</b> | <b>38,360</b> | <b>36,234</b>             | <b>36,850</b>              |
| <b>SUNFLOWER OIL —</b>           |               |               |               |               |                           |                            |
| <b>Oil Opening Stocks</b>        | <b>1,287</b>  | <b>1,212</b>  | <b>1,926</b>  | <b>1,645</b>  | <b>1,989</b>              | <b>1,781</b>               |
| <b>Oil Production</b>            | <b>12,418</b> | <b>15,171</b> | <b>13,554</b> | <b>16,102</b> | <b>15,097</b>             | <b>15,360</b>              |
| <b>Oil Imports</b>               |               |               |               |               |                           |                            |
| Algeria                          | 45            | 229           | 48            | 306           | 328                       | 330                        |
| Turkey                           | 403           | 681           | 656           | 773           | 789                       | 850                        |
| Egypt                            | 315           | 863           | 643           | 777           | 295                       | 300                        |
| European Union                   | 883           | 1,046         | 936           | 1,128         | 882                       | 1,170                      |
| India                            | 776           | 1,151         | 939           | 1,578         | 1,531                     | 1,500                      |
| Others                           | 2,317         | 3,165         | 3,043         | 3,644         | 3,507                     | 3,689                      |
| <b>TOTAL</b>                     | <b>4,883</b>  | <b>7,135</b>  | <b>6,265</b>  | <b>8,206</b>  | <b>7,332</b>              | <b>7,839</b>               |
| <b>Oil Exports</b>               |               |               |               |               |                           |                            |
| Argentina                        | 893           | 936           | 612           | 435           | 496                       | 560                        |
| European Union                   | 157           | 200           | 235           | 367           | 412                       | 320                        |
| Russia                           | 195           | 1,505         | 1,088         | 1,810         | 1,406                     | 1,560                      |
| Ukraine                          | 2,654         | 3,454         | 3,120         | 4,280         | 3,734                     | 4,180                      |
| United States                    | 38            | 19            | 29            | 37            | 29                        | 30                         |
| Other                            | 922           | 1,166         | 1,101         | 1,359         | 1,252                     | 1,228                      |
| <b>TOTAL</b>                     | <b>4,859</b>  | <b>7,280</b>  | <b>6,185</b>  | <b>8,288</b>  | <b>7,329</b>              | <b>7,878</b>               |
| <b>Disappearance</b>             | <b>12,493</b> | <b>14,525</b> | <b>13,895</b> | <b>15,758</b> | <b>15,305</b>             | <b>15,327</b>              |
| <b>Ending Stocks</b>             | <b>1,212</b>  | <b>1,858</b>  | <b>1,585</b>  | <b>1,989</b>  | <b>1,781</b>              | <b>1,814</b>               |
| <b>SUNFLOWER MEAL —</b>          |               |               |               |               |                           |                            |
| Meal Production                  | 14,128        | 16,934        | 15,033        | 17,492        | 16,533                    | 16,714                     |
| Meal Imports                     | 4,645         | 6,955         | 5,465         | 6,300         | 5,781                     | 6,237                      |
| Meal Exports                     | 4,703         | 6,980         | 5,450         | 6,360         | 5,528                     | 6,194                      |
| Disappearance                    | 14,084        | 16,845        | 15,120        | 17,450        | 16,535                    | 16,735                     |
| <b>Ending Stocks</b>             | <b>408</b>    | <b>407</b>    | <b>318</b>    | <b>293</b>    | <b>243</b>                | <b>264</b>                 |



## About the National Sunflower Association

The National Sunflower Association (NSA) is a nonprofit organization dedicated to the promotion of U.S. sunflower and its products, and to the development of sunflower markets throughout the world.

Based in the central North Dakota city of Mandan, NSA was incorporated in 1981. It is funded and governed by U.S. sunflower growers and industry representatives. Agreements with the U.S. Department of

Agriculture's Foreign Agricultural Service provide funding for overseas market development programs, including this publication.

Among the many NSA programs and activities are the following:

- Developing and distributing technical literature on sunflower refining and nutrition.
- Providing technical assistance to foreign companies on oil refining and finished product manufacture; also, providing tech-

nical aid to U.S. confection sunflower customers.

- Producing and distributing a variety of literature pertaining to sunflower markets, the U.S. sunflower crop and sunflower products, including *The Sunflower* magazine, which is published six times annually

- Researching the marketplace and surveying consumer awareness of (and attitudes toward) sunflower products.

- Conducting industrial research abroad, including

confection shelf-life and other utilization studies.

- Hosting foreign marketing and technical personnel, arranging meetings with U.S. sunflower industry representatives, setting up tours of U.S. processing and research facilities, and coordinating educational seminars for the benefit of foreign visitors.

The National Sunflower Association welcomes inquiries from any foreign agencies, companies or individuals interested in U.S. sunflower.

### Contact:

National Sunflower Association  
John Sandbakken, Executive Director  
*Email:* johns@sunflowernsa.com

2401 46th Ave. S.E. Suite 206  
Mandan, ND 58554

*Phone:* (701) 328-5100

*Website:* www.sunflowernsa.com

### Acknowledgements:

The NSA gratefully acknowledges the contributions of the Foreign Agricultural Service, U.S. Department of Agriculture, (www.fas.usda.gov) in the preparation of this electronic publication.

2015 U.S. Sunflower Crop Quality Report data were coordinated by John Sandbakken, National Sunflower Association.

### *U.S. Sunflower Information Online*

The National Sunflower Association has a wealth of U.S. sunflower information online at [www.sunflowernsa.com](http://www.sunflowernsa.com).

This web site provides international marketing information, product specifications, and a list of sunflower product suppliers.

Click on the "Buyers and Sellers" link for a list of sunflower product suppliers and buyers.

The "Sunflower oil" link provides more detailed information on sunflower oil.

Use the "Sunflower seed/kernel" link if you require information about confection sunflower seeds and kernel.

***NSA is an equal opportunity  
provider and employer.***



2401 46th Ave. S.E., Ste. 206 Mandan, ND 58554

*Phone: (701) 328-5100*

*Website: [www.sunflowernsa.com](http://www.sunflowernsa.com)*

