



Idaho State Department of Agriculture 2019 Grasshopper and Mormon Cricket Suppression Program Summary

Introduction

Grasshoppers and Mormon crickets continue to be one of the more serious pest problems for Idaho rangeland and adjacent croplands. Based on annual surveys conducted by the United States Department of Agriculture (USDA) Animal Plant Health Inspection Service (APHIS), Idaho has experienced very serious pest outbreaks in previous years. The management and timely control of grasshopper and Mormon cricket populations are high priorities for the Idaho State Department of Agriculture (ISDA) and our cooperators at USDA and APHIS. Congress has addressed this issue with special funding to the impacted states of Idaho, Utah, and Nevada. With this funding, ISDA has made pesticides available to landowners to control these pests. To qualify to receive these pesticides, a landowner must file a "Request for Evaluation of Need for Suppression of Grasshoppers or Mormon Crickets in Idaho" more commonly known as the Complaint Form, with ISDA. Once the Complaint form has been received, ISDA will evaluate their land to determine if the site has reached economic damage thresholds.

Background

Sixty-four percent of Idaho lands are managed by the Federal Government, with forty-three percent (21.8 million acres) of Idaho being classified as rangeland. The Bureau of Land Management (BLM) manages 11.8 million acres in Idaho, and much of that land is prime grasshopper/ Mormon cricket habitat. There is a significant area of grasshopper and Mormon cricket habitat on federal lands that borders private rangeland and irrigated cropland across the state. Mormon crickets and grasshoppers are cyclical economic pest problems, particularly in Southwestern Idaho. In recent years, significant outbreaks have also occurred in Northern, North-Central, South-Central, and Eastern Idaho.

The grasshopper and Mormon cricket program is divided into four (4) regions: Northern (N), South Western (SW), South-Central (SC), and Eastern (E), with offices in Coeur d' Alene and Moscow (N), Boise (SW), Twin Falls (SC), and Idaho Falls (E). For fiscal years 2017-2020, ISDA has a statewide contract for Drexel 5% Carbaryl bait.

ISDA utilizes electronic data collection to maintain a digital record of incoming complaints and the evaluation of properties. The electronic complaint form continues to be posted on the ISDA Grasshopper/Mormon cricket website and has been utilized by many landowners. In 2018, ISDA transitioned from paper Bait Distribution Forms to recording this information on electronic tablets. The data collection tools used in the field have improved efficiency by allowing data to be entered into the system once and providing a structured way to track complaints, responses, and bait distribution. In addition, GIS points are available to identify known Threatened and Endangered Species locations that could impact treatment options.

Carbaryl 5% bait; referred to as "bait" hereafter; was the only insecticide distributed to landowners. In 2019, ISDA staff did not apply any bait to state lands or any Right of Ways. When bait was not the most effective insecticide for grasshopper control, ISDA reimbursed landowners for insecticide and adjuvant costs on a case-by-case basis.

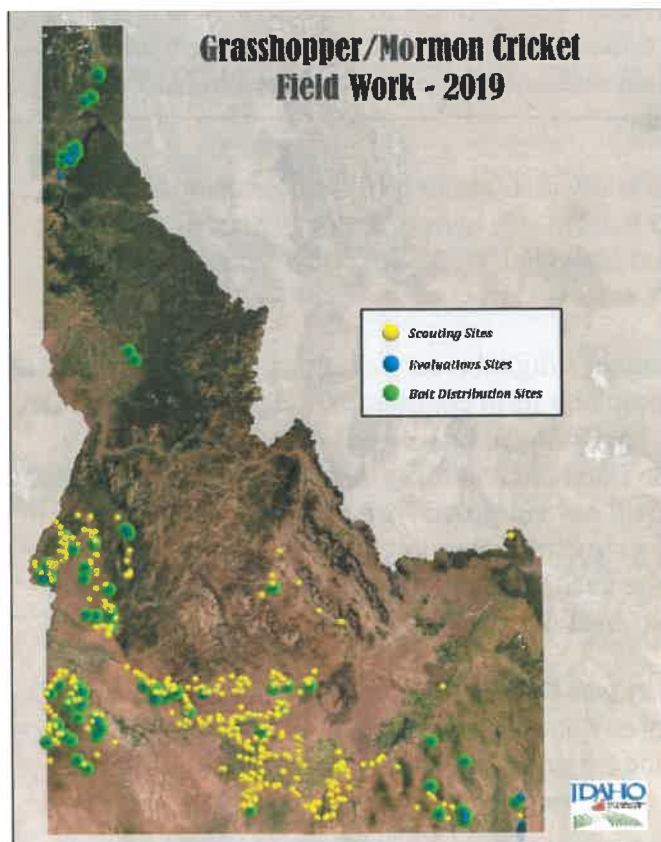
University of Idaho Extension offices in Elmore, Franklin, Idaho, Nez Perce, Latah and Oneida counties continued to be strong partners in the program, fielding complaints using the ISDA grasshopper/Mormon cricket website. County Weed Control offices in Elmore, Franklin, Gem, and Oneida Counties agreed to store and distribute bait to approved landowners on behalf of the ISDA. In addition, bait was stored in ISDA facilities in Boise, Hayden (private facility), Moscow, and Twin Falls. The ISDA seasonal temporary Pest Detection Specialists (PDS) were located across the state in strategic locations to respond to complaints and survey known infestation areas. APHIS and ISDA offices in Boise and Twin Falls continued to work together by sharing scouting information.

Summary of Grasshopper Actions Statewide

Statewide, there were 57 landowner complaints that resulted in 29,320 lbs. of bait that was distributed to landowners in 21 counties. This was a decrease from the total of 121,660 lbs. that was distributed in 2018.

In addition to bait that was distributed through the ISDA, we also reimbursed four landowners for insecticides that they purchased and applied on their own. ISDA was able to scout 695 sites statewide and conduct surveys for both grasshoppers and Mormon crickets simultaneously. ISDA continues to work with the United States Fish and Wildlife (USFW) Service and Idaho Fish and Game (IDFG) to avoid treatment near endangered species.

In Southwestern and South-Central Idaho, the three most common grasshoppers are: Clear-winged Grasshopper (*Camnula pellucida*), Two-striped Grasshopper (*Melanoplus bivittatus*) and Migratory Grasshopper (*Melanoplus sanguinipes*). The map below details the geographic location of surveying and evaluations of both grasshopper & Mormon cricket complaints combined.



Summary of Grasshopper Actions by Region

Northern Idaho

Northern Idaho received slightly below normal precipitation during the winter and spring (January 1 to June 30). The month of May received below normal precipitation which coincided with some of the grasshopper hatching. June, however, had normal precipitation. February through June was cooler than normal. The first day above 50 °F; the temperature at which grasshopper development begins; was on March 21st, which is about a week earlier than normal for the 30-year average. The first 2 grasshopper complaints were received on June 11th; subsequent complaints began about 4 weeks later.

There were 21 complaints across 4 counties, of those, 19 met the ISDA requirements and wished to receive assistance in the form of bait. Total bait distribution in Northern Idaho was 8,440 lbs.; which was an increase from the 6,780 lbs. that were distributed in 2018. Kootenai County received over half of the complaints.

Northern Idaho Private Landowner Grasshopper Complaints and Bait Distribution

| County | Number of Complaints | Number of Landowners that received bait | Carbaryl Bait Distributed (lbs.) |
|---------------|-----------------------------|--|---|
| Bonner | 3 | 3 | 3,320 |
| Boundary | 3 | 2 | 280 |
| Idaho | 3 | 3 | 320 |
| Kootenai | 12 | 11 | 4,520 |
| Totals | 21 | 19 | 8,440 |

Southwestern Idaho

Southwestern Idaho received above normal precipitation during the winter and spring. May received a record setting 4" of rainfall. It was warmer than normal in January, colder than normal in February, however, the remainder of the winter and spring months were normal. The first day above 50 °F was on January 9th, which is much earlier than the 30-year average of March 2nd. Scouting began in Washington County in early April; however, the first grasshopper complaint was received on June 3rd in Boise County.

There was a total of 16 complaints across 8 counties; with 13 of those complaints meeting the ISDA threshold requirement to receive assistance in the form of carbaryl bait. The total bait distribution in Southwestern Idaho was 8,360 lbs.; which was a decrease from the 52,800 lbs. of bait that was distributed in 2018. In addition, there were 3 landowner reimbursements in the Southwestern Region, with two of those reimbursements were in Camas and Elmore County where alfalfa fields had significant infestations.

Southwestern Idaho Private Landowner Grasshopper Complaints and Bait Distribution

| County | Number of Complaints | Number of Landowners that received bait | Carbaryl Bait Distributed (lbs.) |
|---------------|-----------------------------|--|---|
| Adams | 1 | 1 | 160 |
| Boise | 3 | 3 | 520 |
| Camas | 1 | 0 | 0 |

| | | | |
|---------------|-----------|-----------|--------------|
| Elmore | 2 | 1 | 80 |
| Gem | 2 | 2 | 2,920 |
| Owyhee | 1 | 1 | 480 |
| Valley | 4 | 3 | 2,760 |
| Washington | 2 | 2 | 1,440 |
| Totals | 16 | 13 | 8,360 |

Grasshoppers on alfalfa, Hill City (Camas County), 7-9-19



South-Central Idaho:

South-Central Idaho received below normal precipitation during the winter and spring; however, February and May were above average. Temperatures were below average in February and March, however, normal from April to June. The first day above 50 °F was on January 27th, which is much earlier than the 30-year average of March 15th. Scouting began the first week of May; however, the first complaint was not until July 8th in Blaine County.

There were 9 complaints across 4 counties, and 8 of those met the ISDA requirements and wished to receive assistance in the form of carbaryl bait. Total bait distribution in South-Central Idaho was 4,680 lbs.; which was a decrease of the 2018 total of 13,520 lbs. Between 2016 and 2018, Cassia, Gooding, Jerome, and Twin Falls County there were numerous complaints,

however, this year; there were none in these counties with the exception of 1 complaint in Twin Falls County. There was one landowner large acreage reimbursement in Blaine County in alfalfa.

The state range-land in the Cotterell area, located adjacent to the junction of Highway 84 and Highway 86 in Cassia County (aerially treated in 2016 with Dimilin 2L, 6,626 acres) was surveyed frequently in 2019. The grasshopper population in this area stayed well below the economic threshold.

South-Central Idaho Private Landowner Grasshopper Complaints and Bait Distribution

| County | Number of Complaints | Number of Landowners that received bait | Carbaryl Bait Distributed (lbs) |
|---------------|----------------------|---|---------------------------------|
| Blaine | 5 | 4 | 3,000 |
| Custer | 1 | 1 | 600 |
| Lincoln | 2 | 2 | 680 |
| Twin Falls | 1 | 1 | 400 |
| Totals | 9 | 8 | 4,680 |

Irrigated pasture infested with grasshoppers, Gannett (Blaine County) 8-1-19



Eastern Idaho:

Eastern Idaho received less precipitation than normal during the winter and spring, especially in May and June, and temperatures were normal for the winter and spring months. The first day above 50 °F was March 17th, which was later than the 30-year average of March 2th. Scouting began in mid-May and the first complaint was received on July 2nd in Malad.

Bait was distributed from the Oneida County Road and Bridge facility and Franklin County Weed Control. There were 11 complaints in this region, and 6 landowners met the ISDA requirements and wished to receive assistance in the form of carbaryl bait. The total bait distributed in Eastern Idaho was 7,840 lbs.; which was a decrease of the 48,560 lbs. of bait distributed in 2018.

Eastern Idaho Private Landowner Grasshopper Complaints and Bait Distribution

| County | Number of Complaints | Number of Landowners that received bait | Carbaryl Bait Distributed (lbs.) |
|---------------|----------------------|---|----------------------------------|
| Bannock | 2 | 2 | 1,680 |
| Bear Lake | 1 | 1 | 400 |
| Bingham | 1 | 0 | |
| Franklin | 1 | 0 | |
| Oneida | 6 | 3 | 5,760 |
| Totals | 11 | 6 | 7,840 |

In summary, the cost of insecticides to assist landowners statewide decreased in 2019; from \$105,269.54 in 2018 to \$54,554.57 for 2019. The amount of bait used in the 2019 season, 29,320 lbs., was a decrease from the 121,660 lbs. that were distributed in 2018; however, Landowner reimbursement costs in 2019, \$27,873.37, were more than the 2018 total of \$5,630.

2019 Pesticides Distributed/Reimbursed Statewide for Grasshopper Control

| Pesticides Distributed/Reimbursed Statewide for Grasshopper Control (method of application) | Lbs. (\$.91 lb.) | Value |
|---|------------------|--------------------|
| Carbaryl 5% Bait, Ground | 29,320 | \$26,681.20 |
| Landowner Reimbursement Program (this program reimbursed only the insecticide & adjuvant costs) Ground & Aerial Application | | \$27,873.37 |
| Total | | \$54,554.57 |

Summary of Mormon Cricket Actions Statewide

All regions of Idaho, except Northern Idaho, received Mormon cricket complaints. Statewide, there were 80 landowner complaints, and 41,960 lbs. of bait were distributed to landowners in 8 counties, which was a decrease from the total of 127,840 lbs. that was distributed in 2018.

In Southwestern Idaho, the first day over 41°F, the temperature at which Mormon cricket development begins, was January 7th; which is earlier than the 30-year average of February 4th. Scouting began in early April and the first complaint was received on April 17th in Weiser. There were 61 landowner complaints, of those, 45 landowners met the ISDA requirements and wished to receive assistance in the form of carbaryl bait. The total bait distribution in Southwestern Idaho in 2019 was 36,440 lbs.; which was a decrease from the 2018 total of 126,800 lbs. Owyhee, Elmore, and Washington Counties were the most active in 2019. The Owyhee County outbreaks were concentrated near Murphy, Melba, Givens Hot Springs, Grandview, Oreana, Reynolds, and South Mtn Rd; which is south of Jordan Valley. Over 17,920 lbs. of bait was distributed in Owyhee County alone. In Washington County, outbreaks were concentrated north of Weiser, Midvale, and Cambridge; where 11,800 lbs. of bait was distributed. The Elmore County outbreaks were concentrated in Mountain Home, where 6,160 lbs. of bait was distributed.

APHIS conducted large acreage aerial Diflubenzuron and Carbaryl bait treatments on Federal lands, as well as applied ground treatment of Carbaryl bait on Federal Lands in Owyhee County.

In South-Central Idaho, the first day over 41°F was January 5th, which is earlier than the 30-year average of February 19th. Scouting began in May, and the first complaint was received on June 17th in Glens Ferry. There were 2 landowner complaints in Elmore County, and both landowners met the ISDA requirements and wished to receive assistance in the form of carbaryl bait, 1,080 lbs.

In Eastern Idaho, the first day over 41°F was February 3rd, which is consistent with the 30-year average. Scouting began in May, and the first complaint was received on July 2nd in Malad. There were 17 landowner complaints in Oneida County, of those, 14 landowners met the ISDA requirements and wished to receive assistance in the form of carbaryl bait, 4,440 lbs. The majority of the complaints were concentrated in Franklin County.

Mormon crickets on alfalfa, Oreana (Owyhee Co) 5-21-19



Mormon crickets in the snow, 6600', Silver City road (Owyhee County) 6-10-19.



In summary, the cost of insecticide bait to assist landowners decreased in 2019; from \$104,700.96 in 2018 to \$38,183.60 for 2019. The amount of bait used in 2019; 41,960 lbs.; was less than the 127,840 lbs. that were distributed in 2018. Landowner reimbursement costs in 2019, \$1,960.41, were more than the 2018 total of \$0.

Southwestern Idaho Mormon Cricket Complaints and Bait Distribution

| County | Number of Complaints | Number of Landowners that received bait | Carbaryl Bait Distributed (lbs.) |
|---------------|----------------------|---|----------------------------------|
| Boise | 1 | 1 | 400 |
| Elmore | 15 | 13 | 6,160 |
| Gem | 2 | 1 | 160 |
| Owyhee | 28 | 23 | 17,920 |
| Washington | 15 | 7 | 11,800 |
| Totals | 61 | 45 | 36,440 |

South Central Idaho Mormon Cricket Complaints and Bait Distribution

| County | Number of Complaints | Number of Landowners that received bait | Carbaryl Bait Distributed (lbs.) |
|---------------|----------------------|---|----------------------------------|
| Elmore | 2 | 2 | 1,080 |
| Totals | 2 | 2 | 1,080 |

Eastern Idaho Mormon Cricket Complaints and Bait Distribution

| County | Number of Complaints | Number of Landowners that received bait | Carbaryl Bait Distributed (lbs) |
|---------------|----------------------|---|---------------------------------|
| Franklin | 16 | 13 | 4,280 |
| Oneida | 1 | 1 | 160 |
| Totals | 17 | 14 | 4,440 |

2019 Pesticides Distributed Statewide for Mormon Cricket Control

| | Lbs. (\$.91 lb.) | Value |
|---|------------------|--------------------|
| Private Landowners | 41,960 | \$38,183.60 |
| State Land and Right- of-way Treatment | 0 | \$0.00 |
| Landowner Reimbursement Program (this program reimbursed only the insecticide & adjuvant costs) Ground & Aerial Application | | \$1,960.41 |
| Total | 41,960 | \$40,144.01 |

Summary of ISDA Grasshopper and Mormon Cricket Program

In 2019, ISDA continued to suppress outbreaks of grasshoppers and Mormon crickets. There were 137 complaints, 107 private landowners in 22 counties that received assistance in the form of bait. A breakdown of the pesticides distributed and/or reimbursed are in the table below. A landowner reimbursement program was again implemented for qualified landowners and 7 landowners (1783 acres) participated in 6 counties.

For additional information, go to the ISDA website www.agri.idaho.gov and search under the Plants and Insects tab for the Grasshopper/Mormon Cricket Program.

All Pesticides Distributed/Reimbursed Statewide to control Grasshoppers and Mormon Crickets

| Pesticides Distributed/Reimbursed Statewide (method of application) | Lbs. (\$.91 lb.) | Value |
|---|-------------------------|--------------------|
| Carbaryl 5% Bait, Ground, Private Landowners, to control grasshoppers | 29,320 | \$26,681.20 |
| Carbaryl 5% Bait, Ground, Private Landowners, to control Mormon crickets | 41,960 | \$38,183.60 |
| Total Private | 71,280 | \$64,864.80 |
| Carbaryl 5% Bait, Applied to State Lands & Right of Way to control grasshoppers | 0 | \$0.00 |
| Carbaryl 5% Bait, Applied to State Lands & Right of Ways to control Mormon crickets | 0 | \$0.00 |
| Total Lbs Carbaryl 5% Bait Distributed | 71,280 | \$64,864.80 |
| Grasshopper Landowner Reimbursement Program | NA | \$27,873.37 |
| Mormon cricket Landowner Reimbursement Program | NA | \$1,960.41 |
| Total Cost of all Bait and Liquid Insecticide | | \$94,698.58 |

Multi-Year Summary of Carbaryl Treatments on State and County Road Right-of-Ways and State Lands

| Year | Total Pounds Applied | Acres Treated |
|-------------|-----------------------------|----------------------|
| 2005 | 12,175 | 1,218 |
| 2006 | 6,612 | 661 |
| 2007 | 3,906 | 340 |
| 2008 | 3,750 | 194 |
| 2009 | 21,200 | 1,446 |
| 2010 | 4,300 | 428 |
| 2011 | 900 | 92 |
| 2012 | 2,650 | 267 |

| | | |
|------|-------|-----|
| 2013 | 0 | 0 |
| 2014 | 0 | 0 |
| 2015 | 3,550 | 355 |
| 2016 | 980 | 98 |
| 2017 | 2760 | 276 |
| 2018 | 1,040 | 104 |
| 2019 | 0 | 0 |

| Acres Treated | Insecticides | Total Project Cost | Cost Per Acre |
|---------------|---|--------------------|---------------|
| 1783.1 | Diflubenzuron (Dimilin) Malathion Carbaryl 5% bait Cypermethrin (Mustang Max) Chlorantraniliprole (Prevathon) B-cyfluthrin (Sultrus) Alpha Cypermethrin (Fastac) Entrust Organic Insecticide | \$29,833.78 | \$16.73 |

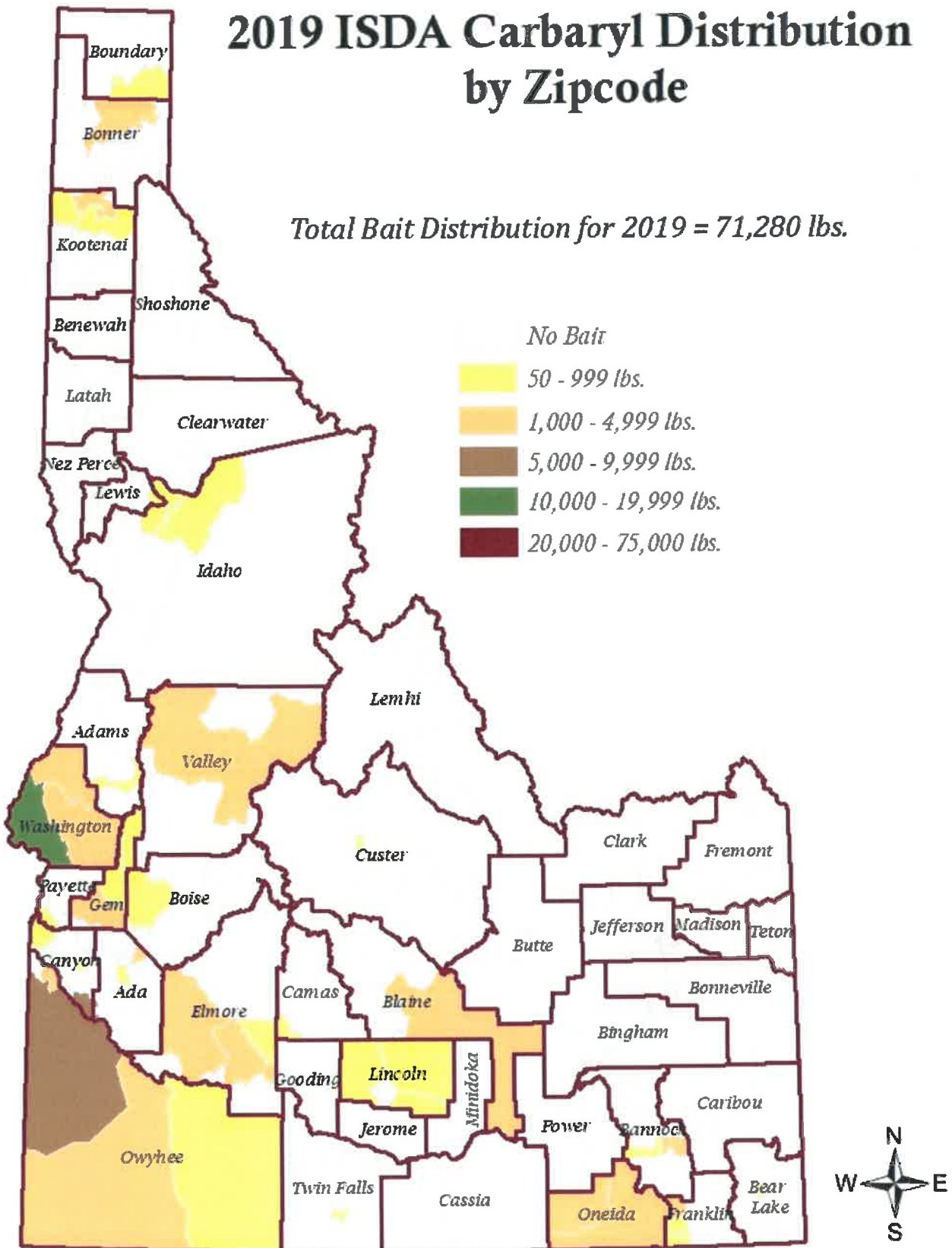
2019 Number of Complaints and Bait Distributions for Grasshopper and Mormon Cricket Suppression (this includes ROW and other State Land Applications, when applicable) in each County

| Rank | County | Number of Complaints | Number of Landowners that received bait | Carbaryl Bait Distributed (lbs.) |
|------|------------|----------------------|---|----------------------------------|
| 1 | Owyhee | 29 | 24 | 18,400 |
| 2 | Washington | 17 | 9 | 13,240 |
| 3 | Elmore | 19 | 16 | 7,320 |
| 4 | Oneida | 7 | 4 | 5,920 |
| 5 | Kootenai | 12 | 11 | 4,520 |
| 6 | Franklin | 17 | 13 | 4,280 |
| 7 | Bonner | 3 | 3 | 3,320 |
| 8 | Gem | 4 | 3 | 3,080 |
| 9 | Blaine | 5 | 4 | 3,000 |
| 10 | Valley | 4 | 3 | 2,760 |
| 11 | Bannock | 2 | 2 | 1,680 |
| 12 | Boise | 4 | 4 | 920 |
| 13 | Lincoln | 2 | 2 | 680 |
| 14 | Custer | 1 | 1 | 600 |

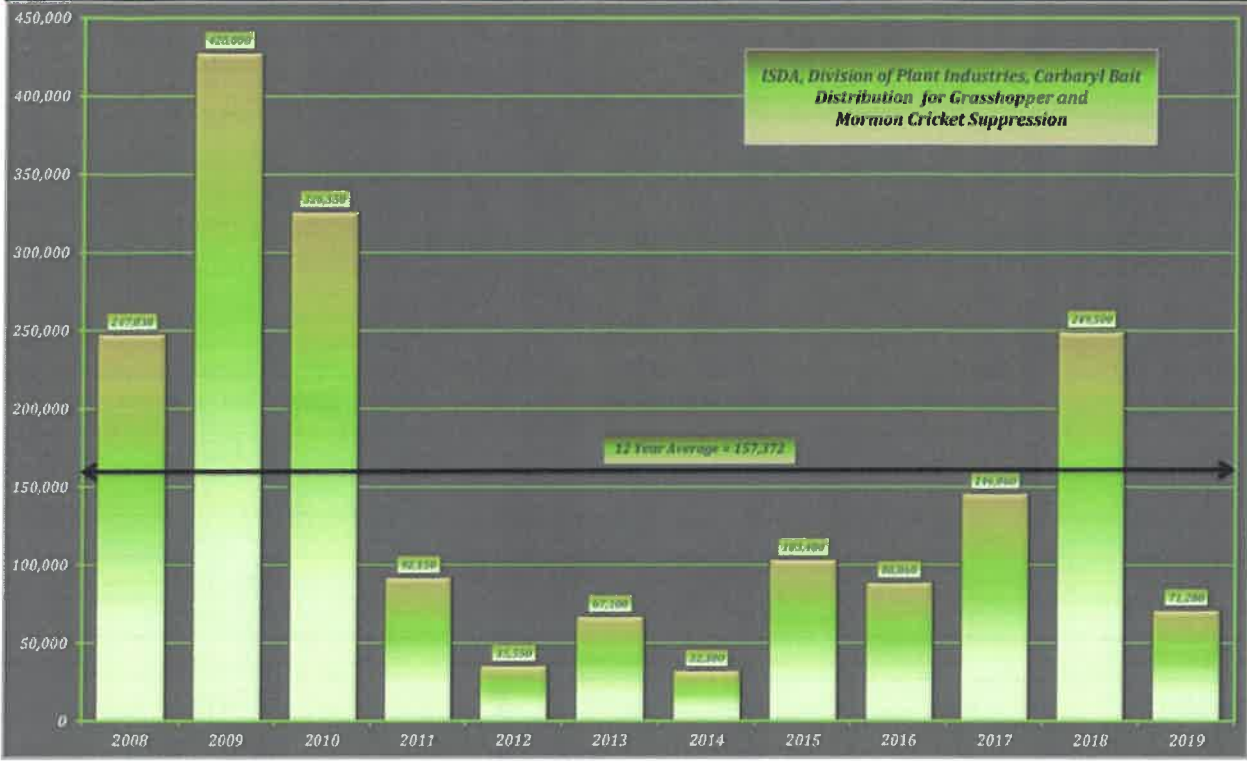
| | | | | |
|---------------|------------|------------|------------|---------------|
| 15-tied | Bear Lake | 1 | 1 | 400 |
| 16-tied | Twin Falls | 1 | 1 | 400 |
| 17 | Idaho | 3 | 3 | 320 |
| 18 | Boundary | 3 | 2 | 280 |
| 19 | Adams | 1 | 1 | 160 |
| 20 | Camas | 1 | 0 | 0 |
| 21 | Bingham | 1 | 0 | |
| Totals | | 137 | 107 | 71,280 |

2019 ISDA Carbaryl Distribution by Zipcode

Total Bait Distribution for 2019 = 71,280 lbs.



ISDA, Division of Plant Industries, Carbaryl Bait Distribution for Grasshopper and Mormon Cricket Suppression



2019 Grasshopper and Mormon Cricket Forecast

Northern Idaho: The below table is a 16-year history of Carbaryl 5% bait usage on private lands for both grasshopper and Mormon cricket suppression. The table shows a peak distribution in 2009, then again in 2015, and then a steady amount since that year. Historical data indicates that a larger economic outbreak is probable at some point.

Northern Idaho

| Year | Number of Counties | Lbs. Distributed |
|------|--------------------|------------------|
| 2004 | 0 | 0 |
| 2005 | 2 | 103,750 |
| 2006 | 2 | 16,400 |
| 2007 | 2 | 7,900 |
| 2008 | 4 | 104,300 |
| 2009 | 8 | 180,750 |
| 2010 | 6 | 52,500 |
| 2011 | 5 | 23,500 |
| 2012 | 5 | 11,600 |
| 2013 | 5 | 5,350 |
| 2014 | 6 | 4,250 |
| 2015 | 6 | 18,120 |
| 2016 | 4 | 5,920 |

| | | |
|-------------|----------|---------------|
| 2017 | 6 | 7,040 |
| 2018 | 7 | 6,780 |
| 2019 | 4 | 8,440 |
| Avg. | 5 | 34,788 |

Southwestern Idaho: The below table is a 16-year history of Carbaryl 5% bait usage on private lands for both grasshopper and Mormon cricket. Bait usage peaked in 2010 and then decreased for six years, however, Mormon cricket outbreaks in 2017 and 2018 has shown that larger economic outbreaks are reoccurring over time. In 2019, Valley County had a late concentrated outbreak (Roseberry area) and will be monitored closely in 2020.

Southwestern Idaho

| Year | Number of Counties | Lbs. Distributed |
|-------------|--------------------|------------------|
| 2004 | 5 | 264,650 |
| 2005 | 6 | 48,950 |
| 2006 | 6 | 69,850 |
| 2007 | 7 | 150,440 |
| 2008 | 7 | 93,850 |
| 2009 | 7 | 205,350 |
| 2010 | 8 | 212,650 |
| 2011 | 9 | 68,100 |
| 2012 | 7 | 20,950 |
| 2013 | 2 | 58,400 |
| 2014 | 5 | 24,750 |
| 2015 | 8 | 73,560 |
| 2016 | 8 | 52,850 |
| 2017 | 7 | 125,540 |
| 2018 | 8 | 180,640 |
| 2019 | 8 | 44,800 |
| Avg. | 7 | 105,958 |

South-Central Idaho: This region was created in 2015. Previous to that year, the area we have now designated as South-Central and Eastern Idaho was designated as Eastern Idaho (24 counties). Bait usage was steady in 2017 and 2018, however, decreased in 2019. Historical data indicates that a larger economic outbreak is probable at some point.

South-Central Idaho

| Year | Number of Counties | Lbs. Distributed |
|-------------|--------------------|------------------|
| 2015 | 2 | 6,750 |
| 2016 | 6 | 29,690 |
| 2017 | 7 | 13,280 |
| 2018 | 5 | 13,520 |
| 2019 | 5 | 5,760 |
| Avg. | 5 | 13,800 |

Eastern Idaho: The below table is a 16-year history of Carbaryl 5% bait usage on private lands for both grasshopper and Mormon cricket combined. Prior to 2015, this region included 24 counties, it now has 10 counties. Bait usage peaked in 2010, then dropped off dramatically for seven years, the grasshopper outbreak of 2018, showed that larger economic outbreaks are reoccurring over time.

Eastern Idaho

| Year | Number of Counties | Lbs. Distributed |
|-------------|---------------------------|-------------------------|
| 2004 | 6 | 89,250 |
| 2005 | 2 | 34,700 |
| 2006 | 3 | 29,000 |
| 2007 | 3 | 26,500 |
| 2008 | 7 | 45,450 |
| 2009 | 5 | 39,200 |
| 2010 | 10 | 60,500 |
| 2011 | 2 | 550 |
| 2012 | 3 | 3,000 |
| 2013 | 4 | 3,650 |
| 2014 | 6 | 3,300 |
| 2015 | 2 | 5,050 |
| 2016 | 1 | 400 |
| 2017 | 1 | 200 |
| 2018 | 5 | 48,560 |
| 2019 | 7 | 12,280 |
| Avg. | 4 | 25,099 |

Major Cooperators for the Grasshopper/Mormon Cricket Program

During the 2019 season, the following cooperators provided significant help in receiving complaints, bait storage, distribution, and overall program delivery:

- Elmore County Pest Abatement
- Franklin County Weed Control
- Gem County Weed Control
- Idaho Transportation Department, Boise (and field offices in Council, Marsing, Moscow, and Mountain Home)
- Oneida County Road and Bridge
- Oneida County Weed Control
- Pineview Horticulture Services, LLC, Hayden
- Simplot Partners, Caldwell, Idaho
- S&P Enterprises, Twin Falls Storage Unit
- University of Idaho, Extension Service, Franklin County, Idaho
- University of Idaho, Extension Service, Idaho County, Idaho
- University of Idaho, Extension Service, Latah County, Idaho
- University of Idaho, Extension Service, Nez Perce County, Idaho
- University of Idaho, Extension Service, Oneida County, Idaho

Program Contacts: ISDA, Plant Industries Division

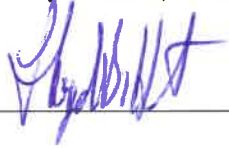
Lloyd Knight, Plants Administrator, lloyd.knight@isda.idaho.gov, 208.332.8664

Jeremy Varley, Section Manager, jeremy.varley@isda.idaho.gov, 208.332.8667

Dan Safford, Program Specialist, dan.safford@isda.idaho.gov, 208.332.8592

Tina Eiman, Program Specialist, tina.eiman@isda.idaho.gov, 208.736.2195

Bethany Gaddis, Administrative Assistant, bethany.gaddis@isda.idaho.gov, 208.332.8626



4/9/20

ROAR Date:
(Recipient Organization Authorized Representative)

ADODR Date:
(Authorized Department Officer's Designated Representative)