ADA COUNTY
PEST ABATEMENT
DISTRICT

2019 Annual Report

Desireé Keeney, Deputy Director

Chris Culley, Division Coordinator

12/31/2019

Contents

Mission Statement

The mission of the Ada County Pest Abatement District (ACPAD) is to abate Pocket Gophers and Yellow-bellied marmots that threaten agriculture or infrastructure, while providing value and outstanding service to the taxpayers who reside within the district.

District History

On March 26th, 1962 the Ada County Gopher Program was established. It was a cooperative project among Ada County, the various canal companies, the U.S. Fish and Wildlife Service and property owners of Ada County. On December 19th, 1968 the Pest Abatement District was created inside the Ada County boundaries, which excluded the municipalities of Boise City, Meridian, Kuna, Garden City, and later Eagle and Star.

Pest Control Management and Staff

Adam Schroeder, Director
Desireé Keeney, Deputy Director
Chris Culley, Division Coordinator
Diana Beahm, Administration Specialist II

Additional Staff: Up to 15 seasonal employees; one full-time GIS Analyst (shared with Noxious Weed Control and Mosquito Abatement District); four full-time administration staff (shared with Noxious Weed Control and Mosquito Abatement District).

ACPAD Methods

ACPAD provides pest abatement services to the landowners residing within the district for the charges they pay toward the special taxing district levy. ACPAD also provides for-hire pest abatement services for tax-exempt properties such as federal, state, and local governments, schools, and churches. ACPAD staff will visit a property, determine the best control methods, and work with property owners to abate the pests using integrated pest management (IPM) methods. ACPAD strives to efficiently and effectively control Pocket gophers and yellow-bellied marmots throughout Ada County in landscaping, yards, gardens, vineyards, pastures, fields and crops.

Training and Education

ACPAD implemented a pesticide label comprehension test during the startup of the season to ensure our applicators had read and understood current rodenticide product labels. ACPAD conducts annual training for applicators and field workers on the following:

- ✓ Safety
- ✓ Ada County Policies
- ✓ On-site Training,
- ✓ Seminar Trainings for Pesticide Applicator License Recertification Credits

This season we completed a total of 526.75 hours of training and education.

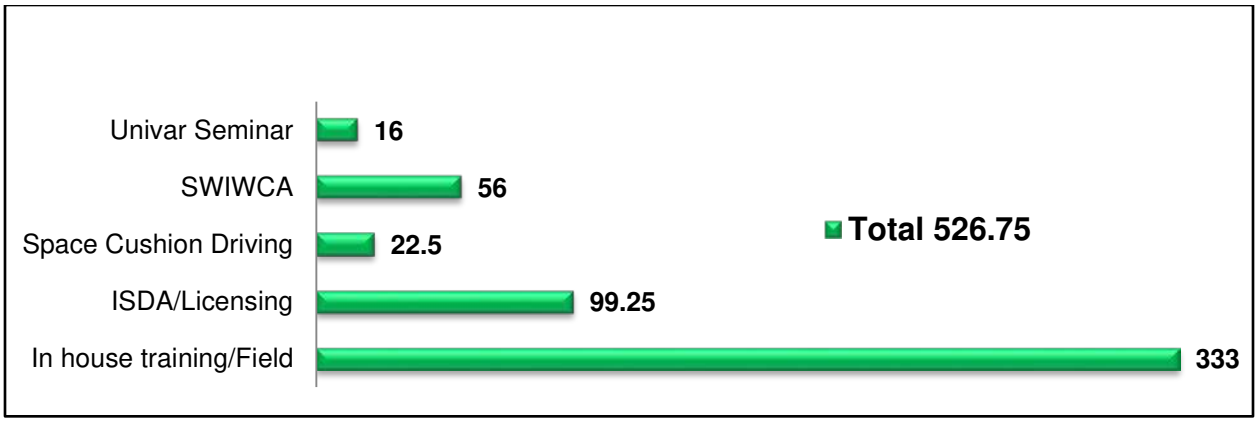


Figure 1: Training hours by seminars attended in 2019 by full-time and seasonal staff.

Pest Abatement 2019 Operations

ACPAD started training mid-February and field work began in March. Early in the season, there were 20 inclement-weather days in the spring (too rainy, snowy and/or muddy). Overall, ACPAD was able to complete field work on 83% of the days in the treatment season (February 25th to November 22nd). There were a total of 32 inclement-weather days out of 184 total working days for the season. During inclement weather delays, crews were able to retrieve traps from field locations set the day before, and work locations where the environmental conditions allowed. The limited production days were *not included* in the total number of non-production days.

In 2019, ACPAD added a fifth field service crew to help improve work order response time. The crews ran from February 25th to November 22nd (week numbers 9-47 for a total 39 weeks), completing a total number of 2,565 work orders[1] and treating an estimated 16,919 acres[2] using bait, smoke cartridges and/or traps.

The total number of site visits and work completed (invoices) from the total work orders requested was 3,989. While there were only 2,565 work orders created, there were more than 3,139 phone calls from the public requesting information or for pest control options. Most of the remaining 574 phone calls were treatment requests for voles or other species, or were from non-district residents within the city limits requesting pest control services.

In 2019, ACPAD received less new clients than previous years (*Fig.2*). Of the current clients, ACPAD continued to see an increase in client call-ahead requests (*Fig.3*)

[1] A map of all work orders by count can be found in Appendix 1.1
[2] A map of acres treated can be found in Appendix 1.2

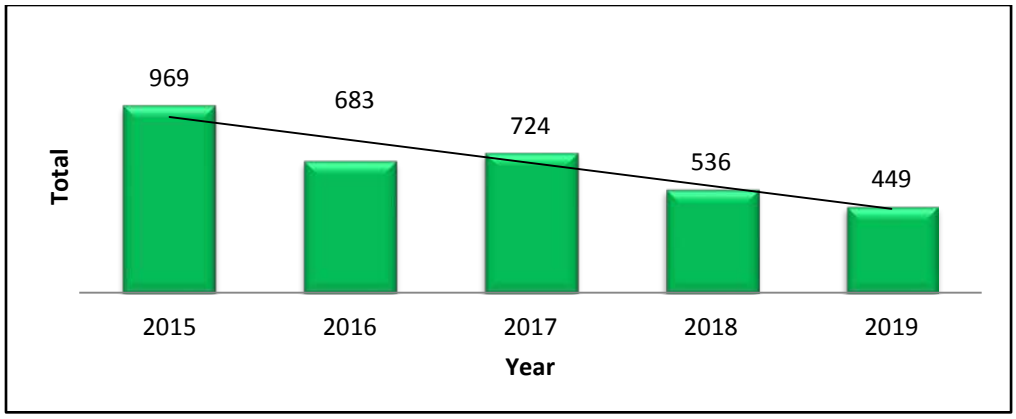


Figure2: The above chart depicts the decline in total new pest clients over the last five years.

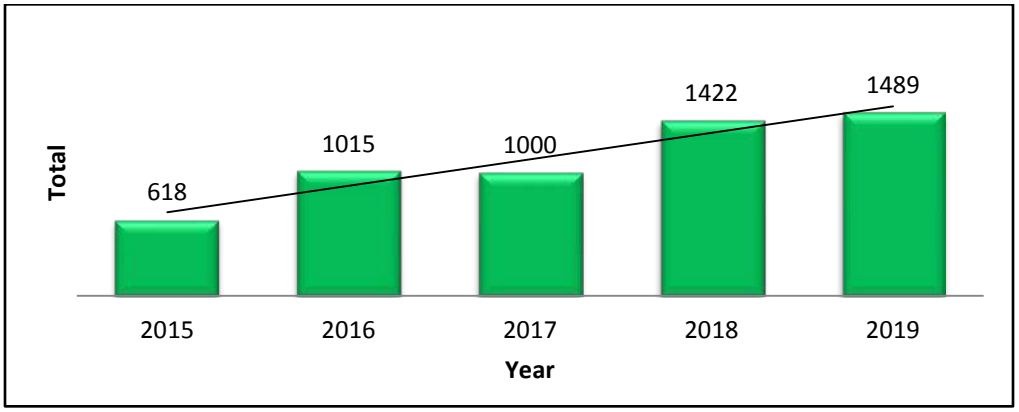


Figure 3: The above chart shows a steady increase for requested call-ahead or notifications before inspection & treatments by year.

Pocket Gophers (*Thomomys* species)

ACPAD typically assigns field crews to service areas throughout the county (Northeast, Northwest, Southeast, Southwest and Rover) [1] for the treatment of Pocket gophers. Of all the work orders completed in the pest department, 92% were for Pocket gophers. In 2019, there were 12 billable work orders, with the majority being for Barber Dam (*Fig.4*). Out of an estimated 16,919 total acres treated, 98.7% of those acres were for Pocket gopher abatement. Field service crews set a total of 12,298 DK-1 traps and caught 4,949 Pocket gophers, used 700 smoke cartridges and applied 627.29 lbs. of Strychnine.

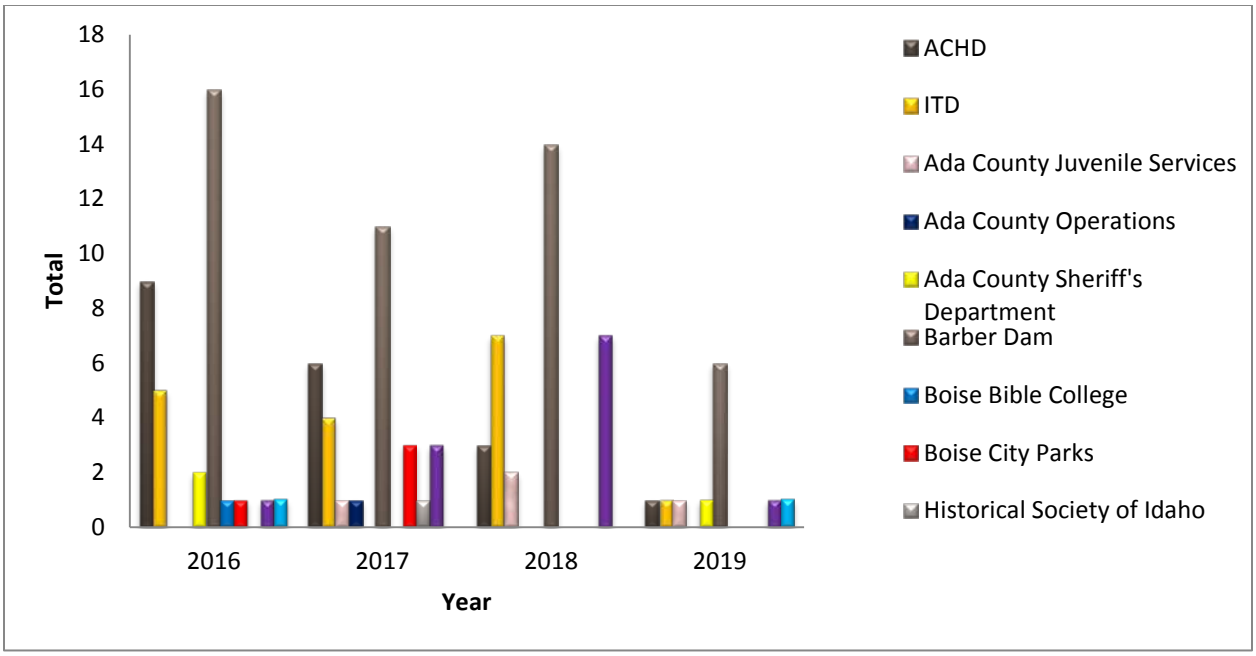


Figure 4: This chart shows total billable work orders completed from 2016 to 2019. In 2016, there were 36 requests from external public agencies, 30 in 2017, 33 in 2018 and 12 in 2019.

Yellow-bellied marmots (*Marmota flaviventis*)

The Rover crew inspected and treated 211 properties this season with an estimated 219.46 treated acres for Yellow-bellied marmots, or Rockchucks. Work orders were received for 36 weeks, beginning on February 11th and ending on October 18th, with the majority of treatment requests received in June (*Fig.5*). Figure 6 shows an overall reduction in Rockchuck infestations on individual properties from work orders from 2016-2018; however, there was an increase in 2019. Data for infestation levels was not recorded if there was an absence of rock chucks, or if the pest was not the target species. Infestation levels were recorded in ranges, and the effectiveness of control methods were determined by monitoring populations throughout the season.

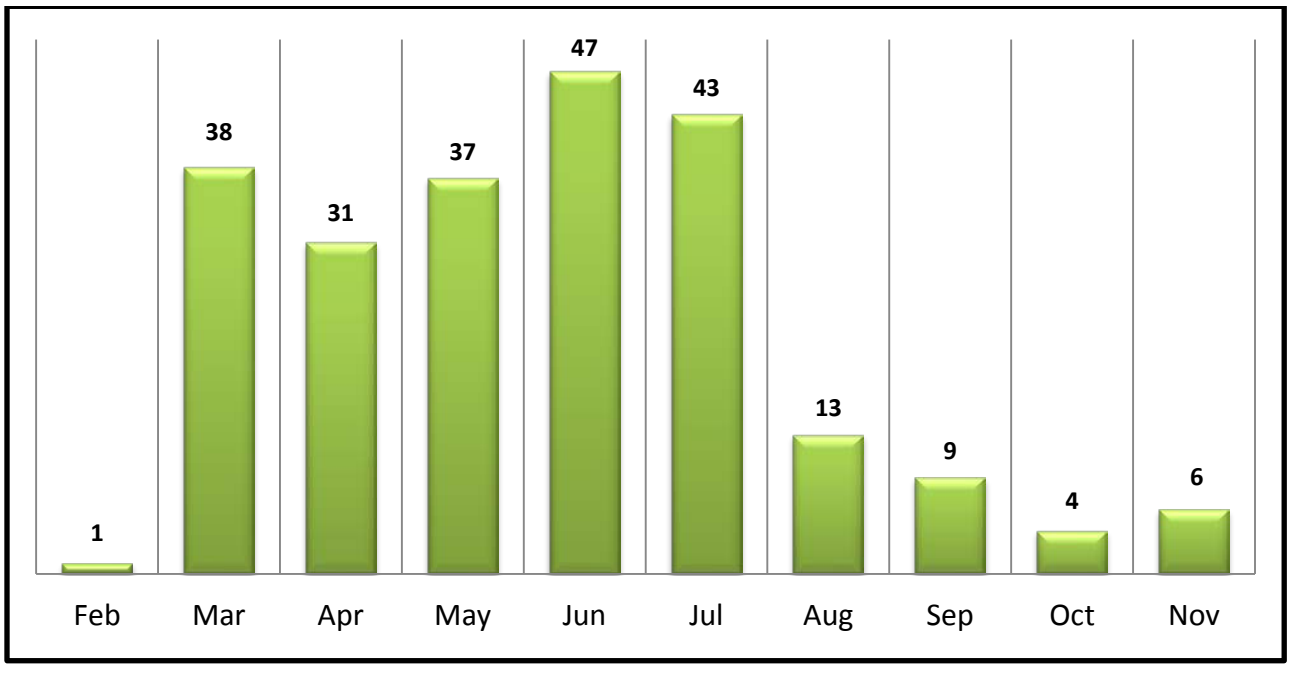
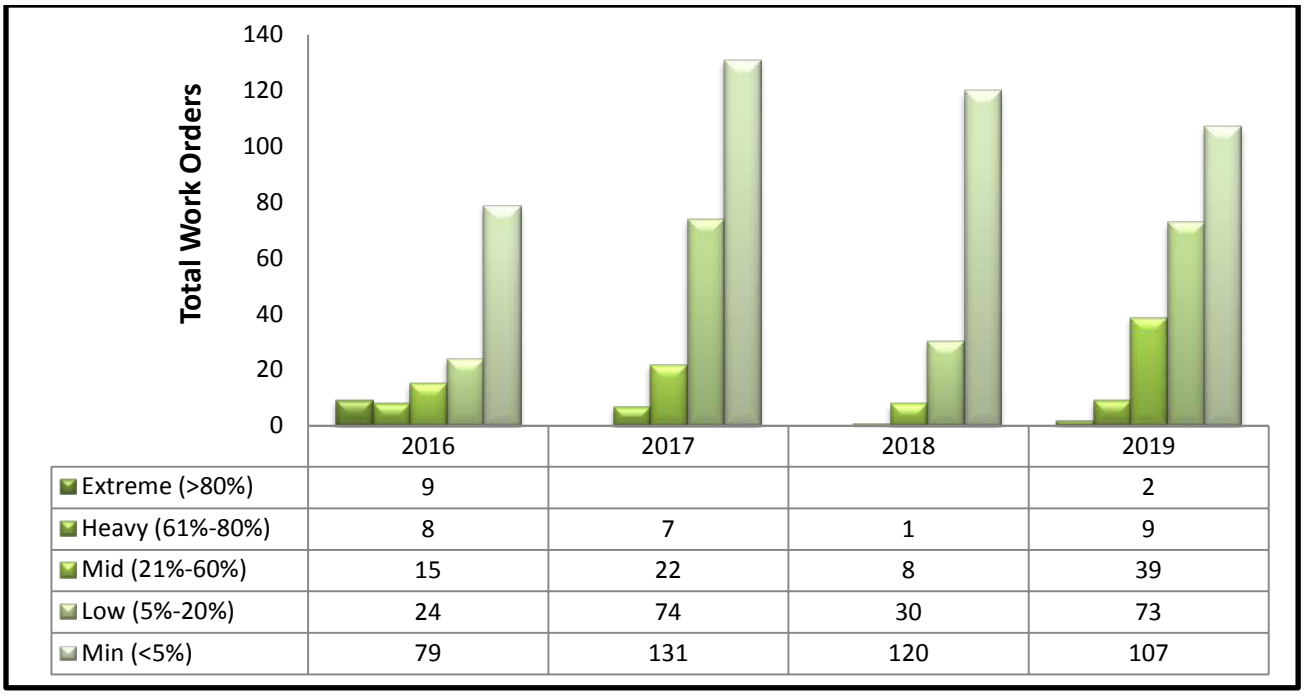


Figure 5: The chart above shows the total number of Rockchuck treatment requests by month for 2019.



	2016	2017	2018	2019
Extreme (>80%)	9			2
Heavy (61%-80%)	8	7	1	9
Mid (21%-60%)	15	22	8	39
Low (5%-20%)	24	74	30	73
Min (<5%)	79	131	120	107

Figure 6: The chart above shows an increase this season in heavily-infested properties and shows infestation levels by count of work orders since 2016.

Addition of a fifth crew

ACPAD added a fifth crew this year to decrease the backlog caused by increasing call-ahead orders and requests for manual trapping. ACPAD achieved a response time of 10 days or less in May even with 80% more inclement weather days this spring compared to 2018, resulting in an average response time decrease of 43% (*Fig. 7*). This response time remained under 5 days from August until the end of the season (*Fig. 8*).

In 2018, four field service crews drove an average of 11,762 miles per crew while in 2019, five crews drove an average of 10,696 miles per crew, resulting in a 9% decrease overall in driving miles per crew. The fifth crew allowed for an increase in productivity earlier in the season, a quicker response time to the district residents, and a savings on mileage and vehicle wear-and-tear. The additional vehicle increased fuel costs by $2000, which was still lower than the average cost of fuel with only four crews previous to 2016.

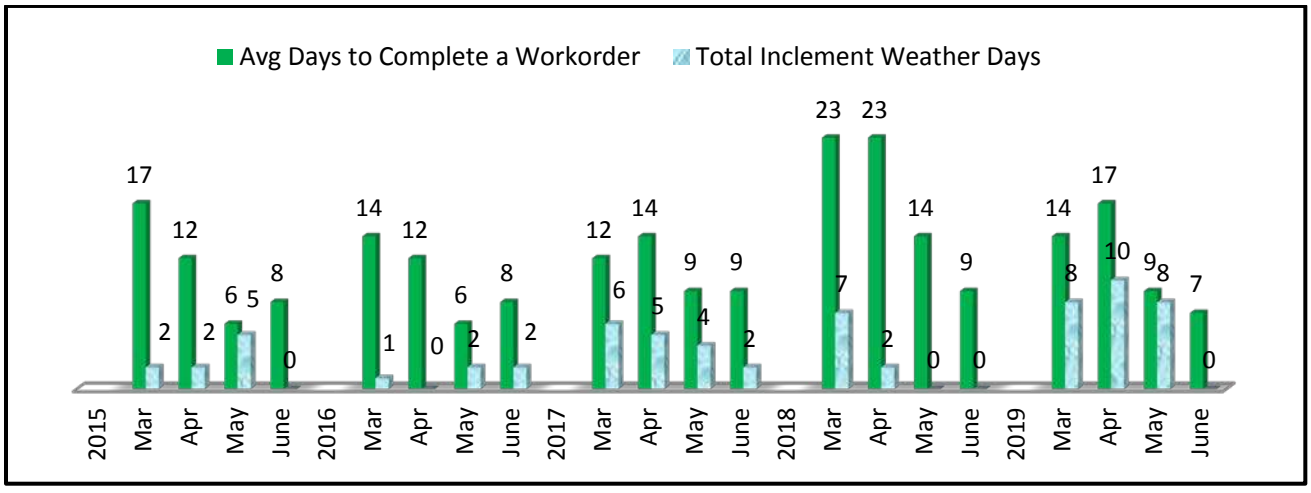


Figure 7: The chart above depicts the average response time from call to completion with lost days due to inclement weather.

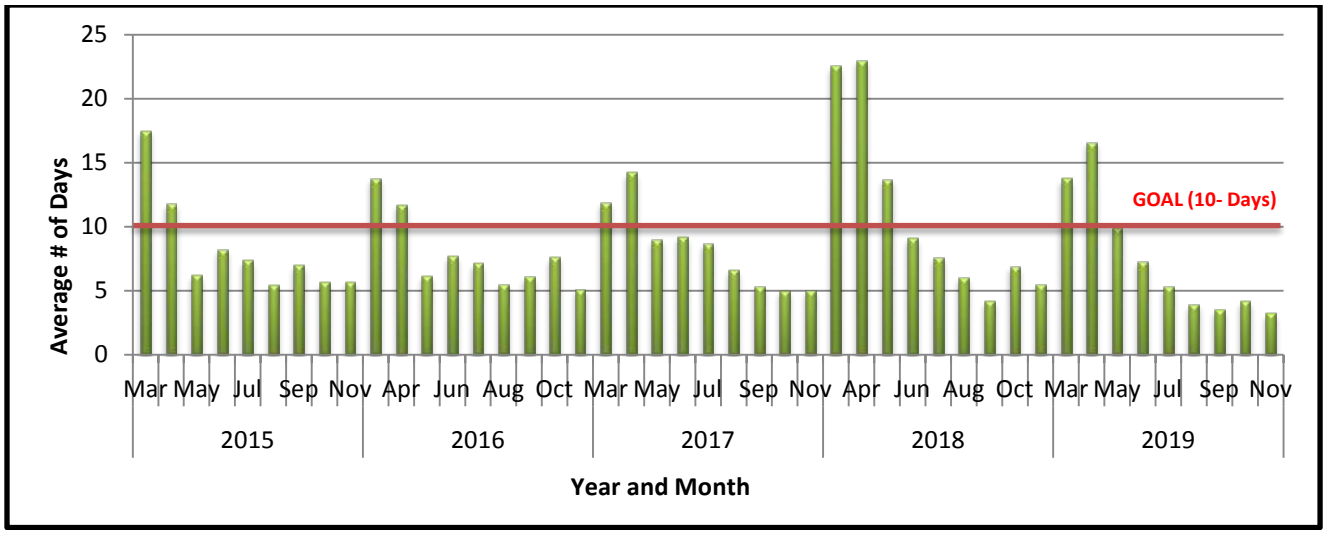


Figure 8: Average response time (from service order request to completion), in days, relative to ACPAD response goal.

Conclusion

ACPAD began the season with in-house training in February and started field training and service in March. Despite inclement weather delays, we were able to reach a response time of 10 days or less by the beginning of June. ACPAD had an overall 40% success catch rate (Pocket gophers trapped), which was a 21% increase from previous years' catch rates.

We experienced a decline in new clients, which is to be expected due to the annexation of district land into city limits (which effectively removes the land from the pest abatement district). There is still much work to be completed within the district, and we will continue to reduce our response time, and increase the productivity of field service crews. Pocket gophers are prolific pests that are very difficult to eradicate, and will often continue to infest on the non-developed land adjacent to district property.

ACPAD strives to meet taxpayer demand by becoming more efficient, by implementing new control efforts through introduced technologies and science, utilizing IPM, and by educating property owners and stakeholders on best management strategies. Pocket gopher and Rockchuck populations are subject to natural variability from predator-prey relationships, fecundity rates, and other environmental factors and will never be completely eradicated.

Pest Department Goals

Goals for 2019:

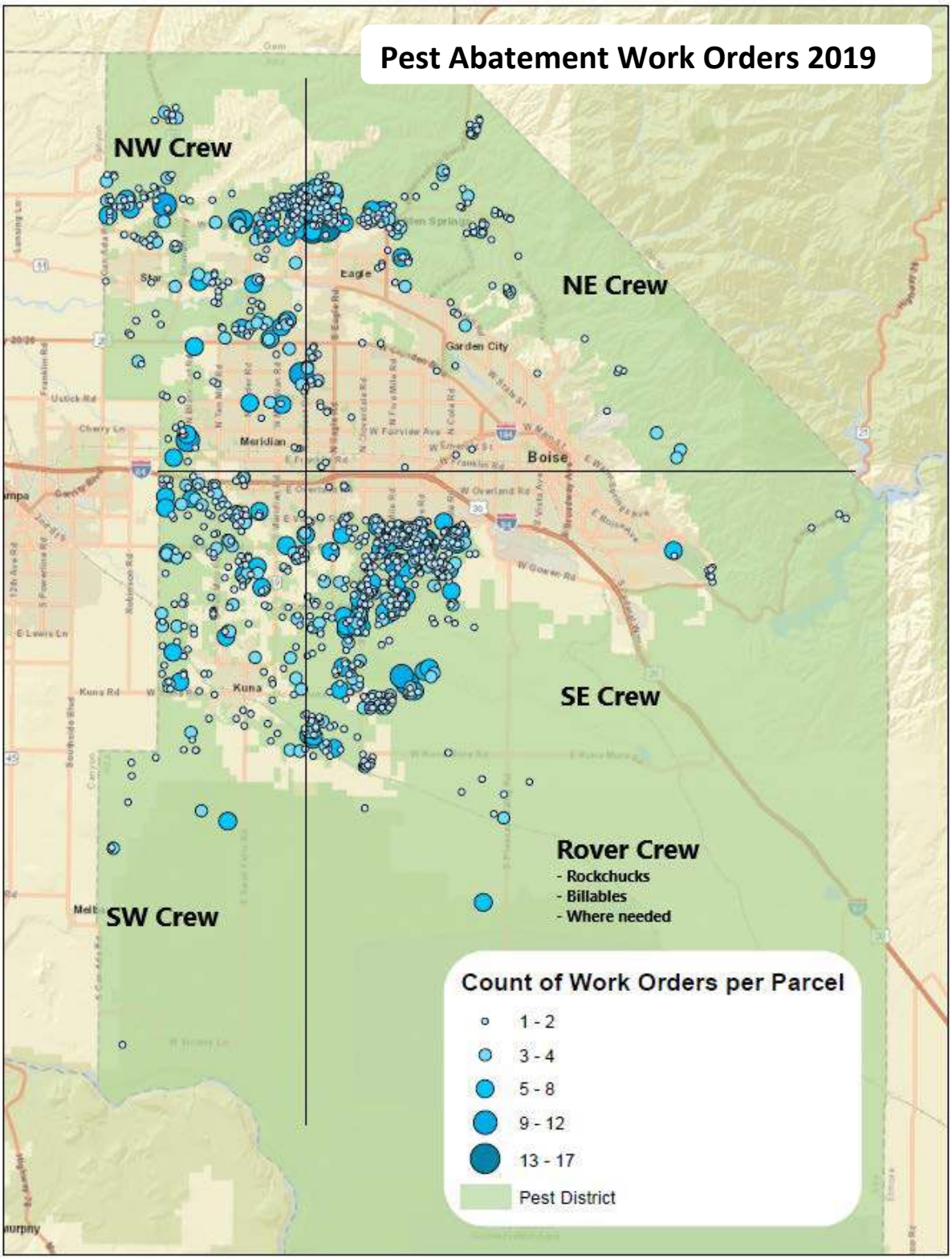
1. Improve response time to public service requests to completion within 5-10 days by May.
   - ✓ Goal: In progress - ACPAD continued to implement multiple crews for larger acreages and infestations this season and an additional crew was added to alleviate the backlog caused by increasing call-ahead orders and requests for trapping, instead of baiting. With the additional crew ACPAD reached 10 days or less by May and an overall 43% average decrease in response time.
2. Finish research and implementation of live trapping and euthanasia for Rockchuck treatments.
   - ✓ Goal: Completed- After the implementation of the live traps and euthanasia in 2018, ACPAD determined that the process was finished and is currently utilized under circumstance where using a bait or fumigant is not feasible.

3. Start researching and testing a form of biological control and IPM for Pocket gophers, an example may be by implementing owl boxes and options for services to residents.
   - ✓ Goal: In-progress- ACPAD has started a raptor project utilizing barn owls for control of Pocket gophers. There will potentially be three stages and ACPAD is currently working on phase one.
4. Complete more public education by assisting the education specialist and assisting in educating land owners about these pests and options for control.
   - ✓ Goal: In-progress- ACPAD technicians worked at the Western Idaho Fair with our education trailer, as well as handed out an estimated 200+ door hangers to property owners with a visible infestation and spoke with over 34 new landowners about our services.

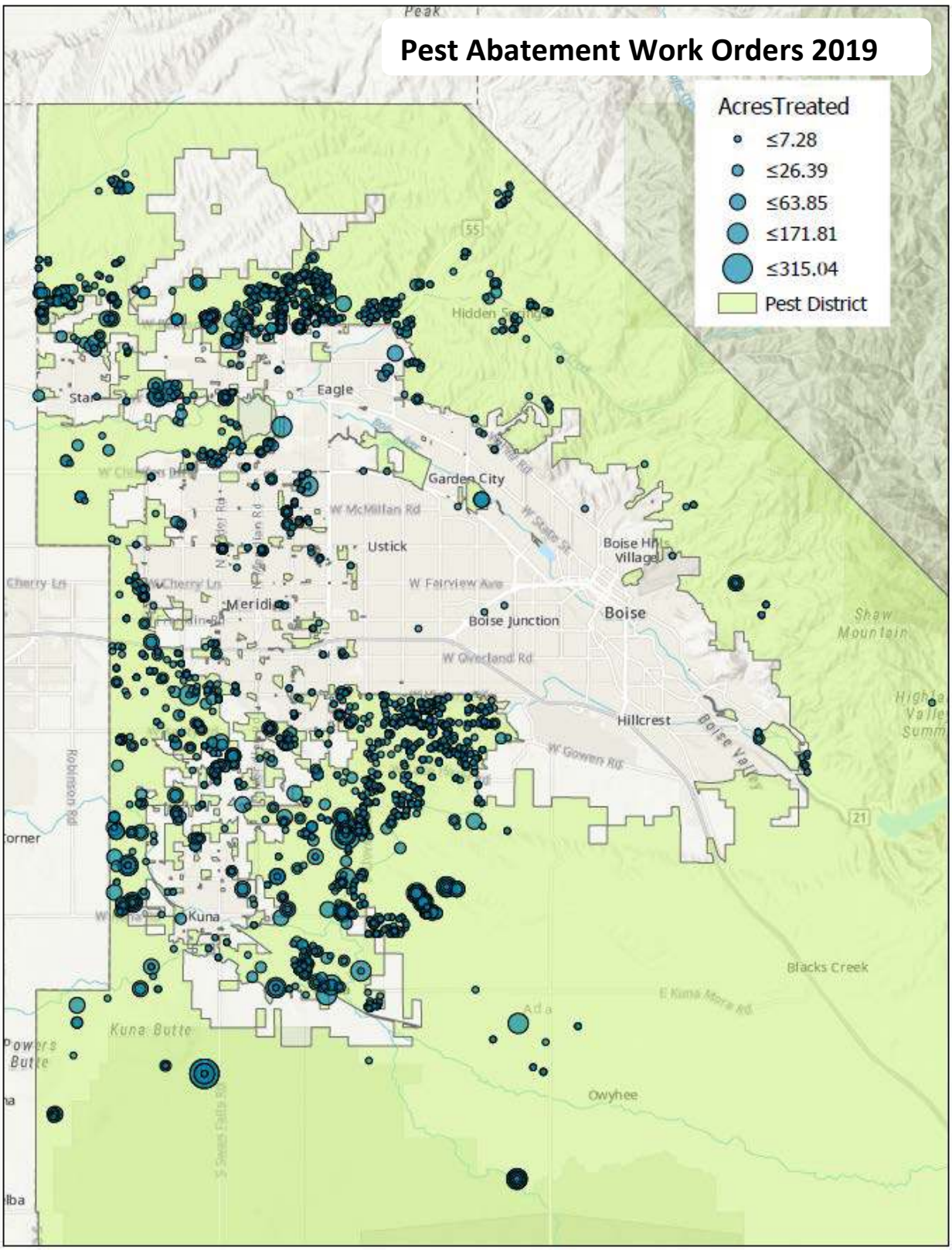
Goals for 2020:

1. Improve response time to public service requests to completion within 10 days (from call to close of work order) by May 4th 2020.
2. Implement new software program (ALAMO) for the field service data recording and make recommendations as needed to continue to improve work flow efficiencies.
3. Install one owl box, and provide options for future biological control services to residents or as a public education tool.
4. Complete and document 25% more public education contacts about pests and options for control.

Appendix 1.1


Pest Abatement Work Orders 2019
NW Crew
NE Crew
SE Crew
SW Crew
Rover Crew
- Rockchucks
- Billables
- Where needed
Count of Work Orders per Parcel
1 - 2
3 - 4
5 - 8
9 - 12
13 - 17
Pest District
Meridian
Boise
Eagle
Star
Garden City
Kuna

Appendix 1.2


Pest Abatement Work Orders 2019
AcresTreated
≤7.28
≤26.39
≤63.85
≤171.81
≤315.04
Pest District
Eagle
Garden City
Ustick
Meridian
Boise Junction
Boise
Boise Hills Village
Hillcrest
Kuna
Kuna Butte
Owyhee
Blacks Creek
Shaw Mountain
W McMillan Rd
W Fairview Ave
W Overland Rd
W Gowen Rd
Cherry Ln
Robinson Rd
Peak