



**Twin Falls
County Pest
Abatement
District
Annual
Report**

2018

Mission Statement: To protect the health and socio-economic well being of the citizens of Twin Falls County from harmful vectors and pests, employing environmentally sound abatement practices.

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Cover Photo; Spring Black Fly
treatments at Murtaugh Grade.

2018 Year End Report Twin Falls County Pest Abatement District

Report Prepared by District Manager Kirk Tubbs

Report to Twin Falls County Pest Abatement District Board of Trustees

*How to read this report: Much background information is contained in this report and is similar from year to year, new or updated information is marked with an * in order to streamline reading for repeat readers of this report.*

Introduction

*The Twin Falls County Pest Abatement District (TFCPAD) was created by public vote in 2008 and started work in spring of 2009

*This season was record breaking in terms of the amount of water in and flowing through the Snake River. High flows reduced the winter treatments for Black Flies and created exceptional season long habitat for Black Fly production. The additional water created additional mosquito habitat along the river and an abundance of irrigation water. The staff consisted of one full-time manager, a full-time technician and during the summer three full-time seasonal (one was summer intern from CSI). A part-time office administrator helps out with board meetings.

Geographic Area

The TFCPAD primarily conducts work inside Twin Falls County. The county contains approximately 1,232,000 acres. Twin Falls County has a population of 77,230 (2010 Census). Work is targeted to the areas that will produce the best results for the time and money spent.

Surveillance and subsequent treatment areas for Black Fly control consisted of most moving waters in Twin Falls County: The Twin Falls Canal system which contains 110 miles of major canals and over 1,000 miles of laterals, the Salmon Falls Canal System which has over 300 miles of main and lateral canals, and the Roseworth Canal System which contains over 10 miles of main and lateral canals. In addition, portions of coulee drainage streams, Rock Creek, Deep Creek, Cedar Draw, Dry Creek, Salmon Falls Creek, and the Snake River received some treatment. The Milner Irrigation Canal System was also sampled; this system originates in Twin Falls County, runs through Cassia County, then returns into Twin Falls County and contains over 25 miles of canal.

Mosquito Control work was conducted mainly in the more populous areas of the county. Priority in treatments was given to residential areas, locations where historically West Nile Virus was found and recreational or high public use areas. Mosquito monitoring conducted during the season further helped to focus our work where it was most needed. In general, the Snake River was the dividing line for treatments, but a few areas in adjacent counties were treated when we treated along the Snake River due to their direct impact on Twin Falls County. Clearlake's Homeowners Association and the area near Centennial Park are some examples.

In addition to our work inside Twin Falls County, some limited surveillance work was conducted in Jerome, Gooding, Cassia, Lincoln and Minidoka County. This also provided some mosquito samples which were tested for West Nile Virus (WNV).

1. Collaborative Agreements

We have welcomed partnerships and the sharing of information and resources in order to fulfill our mission. All parties worked with previously continued in provide assistance. Some of the more significant collaborators are noted.

*Idaho Department of Health and Welfare provided WNV testing supplies as well as money for mosquito surveillance through a grant. The state lab also provided confirmative virus testing. This money was used for additional surveillance in surrounding counties as well as additional trapping and providing a new style trap that was trialed.

The Twin Falls Canal Company, Salmon Falls Canal Company, and Milner Irrigation District, North Side Canal, Idaho Power and USGS provided canal information, water flow rates, and data and access to their waterways for treatments.

*Twin Falls Canal Company is starting the process of putting in Obermeyer weirs to better regulate flow and conserve water. TFCPAD is helping to fund this effort as the long-term results will be less Black Fly and mosquito habitat to treat and cost savings to the district.

Clearlake's Homeowners Association contracted to have mosquito surveillance and control. This resulted in treatments that benefited Twin Falls County residents in adjacent area as well as the homeowner's association.

Blue Lakes Country Club contracted to have mosquito control conducted. This is directly across from Centennial Park and provided a direct benefit to the public at the park.

71 Cattleman's Association members partnered with us to treat water sources in areas of concern for sage grouse. We provided product and training, and they provided the manpower to treat these remote locations with the goal of reducing WNV incidence in sage grouse. Members of this organization operate in both Twin Falls and Owyhee Counties

Tubbs Berry Farm collaborated with the district to host a bee education workshop for mosquito control operators. This brought attendees from all over the state and garnered some national attention.

Idaho Power partnered with us to promote their irrigation efficiency



Photo 1. Mosquito control operators from through the state get hands on pollinator protection training.

program. This is really a win-win. Not only does the irrigator save money on irrigation, but less leaks means less habitat for mosquitoes.

*INEBRE intern; This was our fourth year we partnered with College of Southern Idaho which administered the INEBRE (Idea Network of Biomedical Research Excellence) Intern program. Their goal is getting students involved with collaborative research, and gain real world experience especially in the biology and public health fields. The Intern received pay through the grant program, training, field and lab experience from us and we got some extra help. It was a great collaboration all the way around, and we are planning on this for next year.

2. Surveillance

2.1 Black Fly (BF) adult surveillance (Also known as Biting Black Flies and Buffalo Gnats.) is conducted using some of the same traps and methods that are used for adult mosquito's surveillance. The traps are not intended to remove or catch all the BF, rather they provide a measurable comparison from year to year and from site to site.

Primary reasons for treatment of BF populations are to reduce the economic impact to livestock and reduce the potential for transmitting viral Vesicular Stomatitis virus (VSV). No VSV was detected in Idaho this year.



Photo 2. Black Fly adults resting near canal.



Photo 3. Black Fly larva on a grass from stream edge.

Simulium vittatum is the predominate species found throughout the county. It generally does not bite humans; it prefers to feed on livestock and is a concern because of its potential for disease transmission and its negative effect on livestock behavior. When people notice Black Flies swarming in their face, it is generally this species.

Simulium bivittatum is a very small species of BF that has a similar lifecycle and habitat preferences to Simulium vittatum, but bites people as well as animals. They are smaller and harder to see, and are general more numerous in the west end of the county. Locals often refer to them as no-see-ums.

2.2 Black Fly larval surveillance in canals primarily took place with yellow sample ropes hung in the waterways. A six-inch section of the rope was marked off and larvae found on that section were monitored. Other waterways were also monitored by pulling up vegetation and looking at it and rocks for larva presence. In fluctuating river and stream flows, the BF Larva move around a great deal in the stream searching out optimum attachment sites, rendering the rope surveys not as effective. Some waterways are surveyed year-round. Surveillance was done in order to find BF Larva, to gauge larval stage and growth so treatment could be conducted where needed and at optimum larval stage.

2.3 Mosquito surveillance for larva was conducted by dipping for larva in standing water sources such as ponds and water retention areas. Work primarily focused around the more populated parts of the county; however, any standing water encountered was sampled whenever possible.

***Adult mosquito** trapping was conducted on a weekly basis during the season (April 4 to Oct 13). Traps used a light and CO2 produced by dry ice or a CO2 cylinder to attract the mosquitoes. Traps were set in the evening and retrieved the following day. A total of 205 trap nights produced a total of 1687 female mosquito that were identified to species as a part of this surveillance. (This number excludes data where traps failed or from surrounding counties.) This trapping provided mosquitoes for West Nile Virus (WNV) testing as well as feedback on treatment results and needs. Testing of mosquitoes this year was conducted in-house with confirmation testing of results being done by the state health lab. Using data from previous years, we conducted surveillance in three ways:

Targeted surveillance of high-priority areas.

Random sampling to locate new areas in need of treatment.

Abundance trapping to provide a look at populations over time.

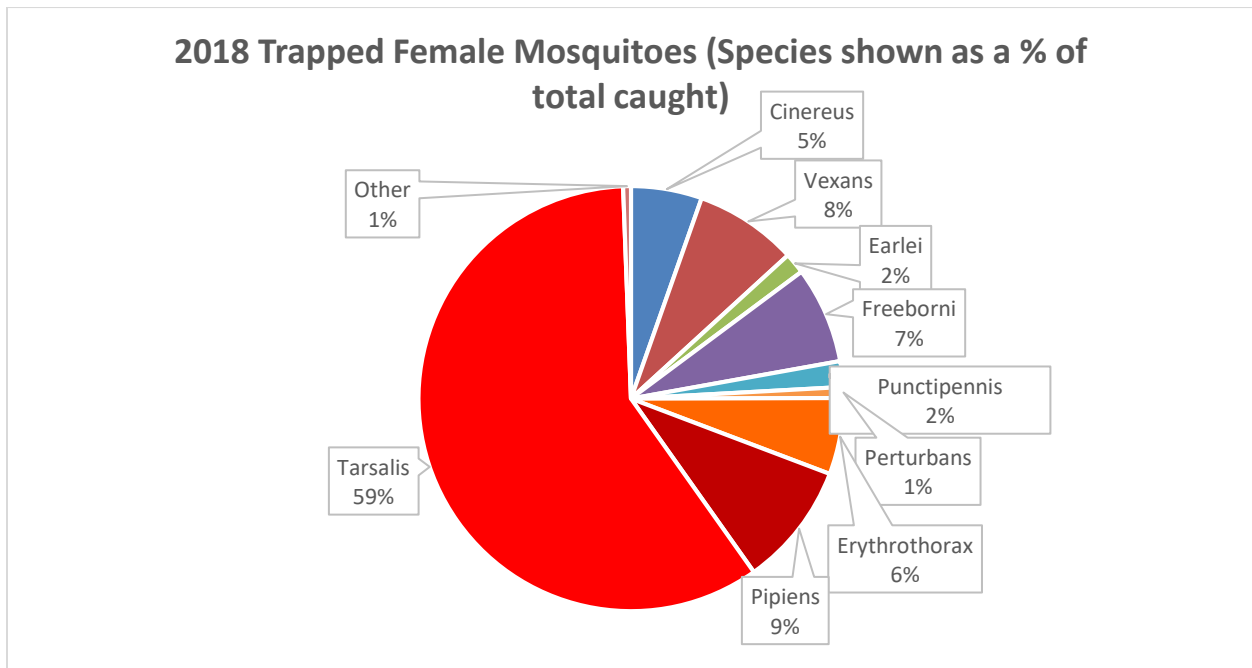


Figure 1. 2018 total by species.

Using data from previous years and state guidelines we have established a Twin Falls County specific operations guide and treatment thresholds and procedures. These guidelines were followed regarding trap counts of certain mosquito species and when a high number were caught, traps were reset to help determine if the population was rising or falling and to evaluate the effectiveness of our treatment efforts. The goal was to find potential problem areas quickly so that we could maintain key mosquito species population numbers below the threshold where disease is easily transmitted. These guidelines are reviewed and updated with the new data as needed.

2.4 West Nile Virus Testing

*West Nile Virus is considered endemic in Idaho. Our goal is to reduce the likelihood of virus transmission by limiting its primary vector in Twin Falls County: the *Culex tarsalis* & *Culex pipiens* mosquitoes. We test mosquitoes regularly as part of our surveillance. This year 104 pools of mosquitoes were tested in-house as part of routine surveillance. Each pool contains from 1 to 50 mosquitoes of the *Culex* species from one location that are tested together. TFCPAD uses a rapid immunochromatographic system for screening samples (referred to as a RAMP test). It provides quick and accurate testing of samples. In some cases, samples fall within a range where additional testing is required; when needed, the state lab provided more advanced confirmative testing.

*Results of RAMP test: Aug 8 WNV positive mosquitoes were found in a trap North of Buhl along the river. (along Gooding / Twin Falls County line). Aug 13 WNV positive mosquitoes were found near Twin Falls and the Snake River.

Mosquito species identification also lets us know what type of habitat to look for, and if we were dealing with a potential vector of disease or just a nuisance mosquito. Vectors of disease generally bite, lay eggs and then feed again. These repeat feedings transmit the disease. Nuisance species bite, lay eggs and die and are not likely to spread disease. Most nuisance species are in flood water areas and most disease vectors come from more permanent standing water. Trap results can be used in planning when and where to work to reduce potential disease vectors before they become a problem.

* Figure 1. shows the population distribution of trapped female mosquitos in TFC. *Culex tarsalis* and *Culex pipiens* are the two species likely to carry WNV. *Culex* are most often found in ponds and various containers. *Culex pipiens* most often come from storm drains and small containers of water in areas where people live. A dry summer favors *Culex* species mosquitoes. Adults overwinter as pregnant females, emerging in the spring ready to lay eggs in small ponds or containers. Flooding events favor other species whose eggs lie dormant in the soil waiting for the right flood conditions to hatch. This year was a perfect storm for WNV mosquitoes, A dry hot summer tends to concentrate people mosquitoes and birds at the same water sources leading to more transmission. By all counts this year could have been much worse for mosquitoes. Figure 2 shows all mosquito species caught combined. In general if we keep this average below 50 per trap night at the peak we have very little public complaint and reduced WNV transmission.



Photo 4 Mosquito larva in a dipper cup sample

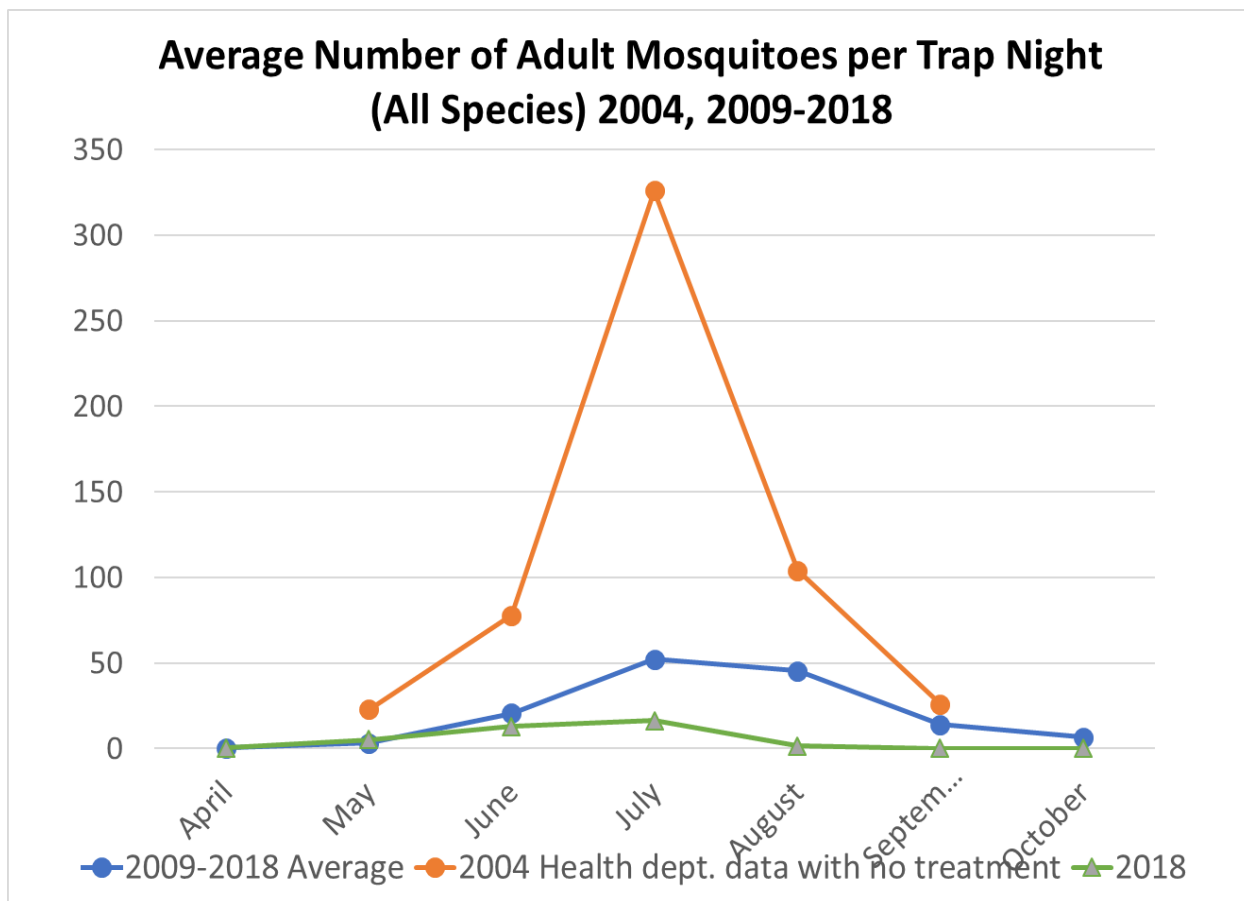


Figure 2: Includes 2004 data from health department during which no control work was conducted; remainder is TFCPAD data.

3. Mapping

*Graphic Information System (GIS) units were used to provide accurate records of treatment locations, to measure treatment areas, and to record this information for future use. The GIS units allow for field recording of data, field review of previous work and mapping of all treatments. The GIS tracks how long products are effective and changes color when it's approaching time to inspect it again. This is really a key to good county wide coverage even when we have changes in personnel, it preserves knowledge from one year to the next. The public can also view this map online by going to tfcpad.org.

4. Source Reduction Source Reduction

Educational efforts to reduce potential pest habitat has been an important part of our public education campaign. This can be one on one education with homeowners, speaking to groups or working with schools. The biggest long-term impact we are having in source reduction is through educational effort. We cannot find and treat every potential breeding site, but when landowners know what to look for they help immensely by draining or flushing standing water. The species of concern

for WNV are short range flyers which is why preventing mosquito production in backyards is so important.

TFCPAD helped promote a Tire Amnesty day and conducted public education as part of this day. Southern Idaho Solid Waste offers two tire amnesty days per year across the region. TFCPAD promotes the spring day in the media as removal of discarded tires greatly reduces container habitat for certain species of mosquitoes. No direct cost for tire disposal is incurred by TFCPAD.

Educational Public Service Announcements were produced and aired during the summer months on local radio and TV stations to educate people about backyard mosquitoes. Eliminating mosquito habitat when possible is the best way to eliminate mosquitoes.



Photo 5. Standing water, the small black dots are the larva.

We also increased the number of mosquito traps during the month of July with the main intent of educating the public. By setting traps in new areas, we have found that the traps garner public attention and an increase in visits to the website, and Facebook. Links to both are posted on the traps and the traps are generally quite visible. The person setting them has a chance to visit with residents and it's a great way to have that more of those one on one interactions that are so good for answering questions and educating the public.

5. Larval Control

Almost all control efforts were targeted towards the larval stage of both mosquitoes and black flies. At this stage of the lifecycle they are confined to a smaller nursery and treatment is safe and effective. Studies suggest that larviciding 1,000 acres is the equivalent of adult control on 72,000 Acres. (Larvicide Logic educational publication, Valent USA 2013) With Black Flies, there is no efficient way to control adults without treating large geographic areas. A mile of river with good Black Fly habitat can produce over 1 billion black flies per day; hence it is best to treat the source.

Our primary larvicide is Bti (*Bacillus thuringiensis v. israelensis*) which is a product of a natural soil bacteria. When refined it produces multiple protein crystals that when consumed, react with the alkaline gut of a mosquito or black fly resulting in larval death. There is no secondary toxicity, or recycling of the product. It has little to no effect on non target species and does not persist in the environment. Black Fly Larvae were treated using Bti in a solution applied to moving water. Mosquito larvae were treated with

Bti spread over still water. Larval stage, quantity and water temperature were monitored to determine treatment intervals and application rates.

5.1 Black Fly

This year’s black fly control efforts are one for the record book. Record river flows created incredible BF habitat. As a result, we experienced more adult BFs produced in the county and flying in from the surrounding area. Black Fly treatments treat the volume of water, and as a result the higher flows require more treatments and cost to achieve good results. This year’s river flows were so high that we used more than double our normal amount of Bti. In the Chart below, you can see that once winter treatments started in the district, we were able to maintain Bf populations at a fairly low level. This year’s high flows raised levels significantly. Much of the increase in Aug Sep and October is related to Black Flies flying in from untreated surrounding areas.

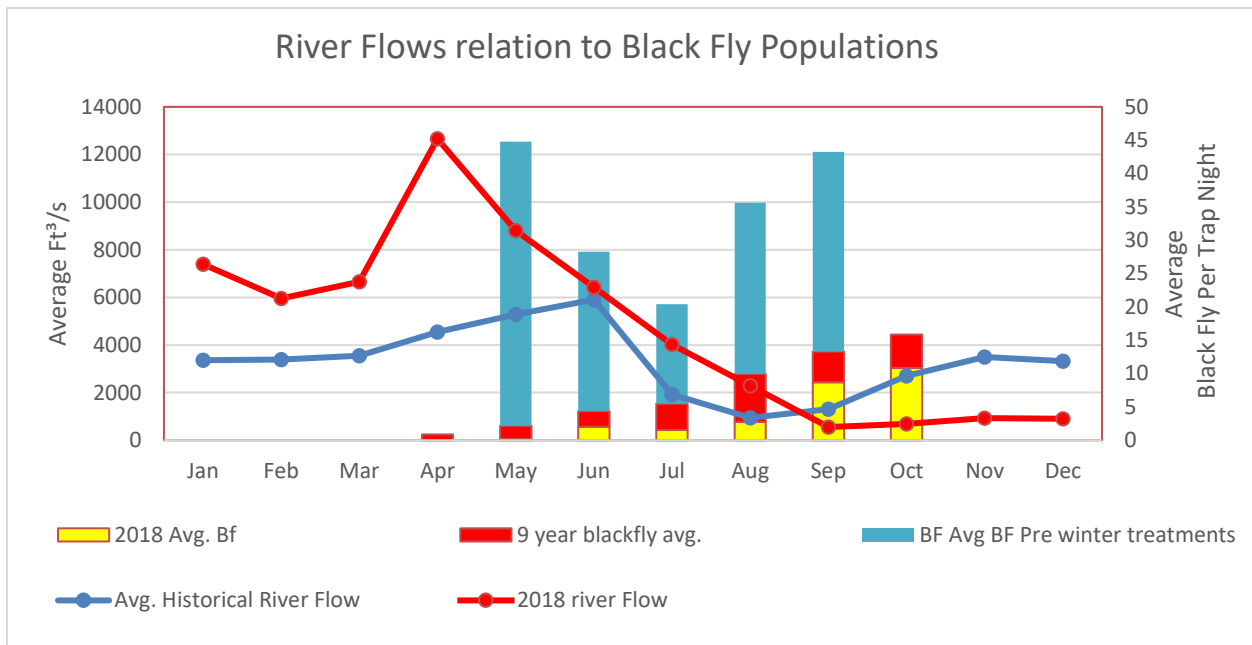


Figure 3 Chart compares historical river flows to 2018 flows and the resulting BF population. Note the dip in flow rates typical during Dec Jan and Feb where we usual conduct our winter treatments, which spares us trying to treat during peak spring flows.

Black fly reproduction continues even during the winter. Larvae grow slowly, but have a special adaption triggered by the cold that allows them to emerge as adults and immediately lay eggs without feeding or mating during warmer winter days. Although black fly numbers can increase in overwintering habitats, the winter also provides an opportunity to get an early start on black fly management for the following season. During the winter, canals are dry and the overwintering habitat is limited, so winter treatments can greatly reduce populations. Overwintering larvae that emerge as adults during the spring disperse and colonize canals. By reducing the number of black flies that first emerge during the spring we expect to reduce the overall population for the year. During years with typical water flow rates, the winter is one of the most cost-effective times to treat. See figure 3 for the dramatic change in populations following the start of winter treatments.

Flight range for Black Flies is 10-20 miles. Our treatment program targeting black flies in Twin Falls County that included winter treatments gives excellent results. However, the ability of black flies to disperse long distances complicates management efforts since adults can immigrate to our area from untreated breeding sites outside the County. Despite our best efforts we will have higher numbers of black flies late summer and fall due to immigration from untreated areas outside of the county. Black fly control is best accomplished on a regional level by targeting the larvae in canals and rivers before they hatch.

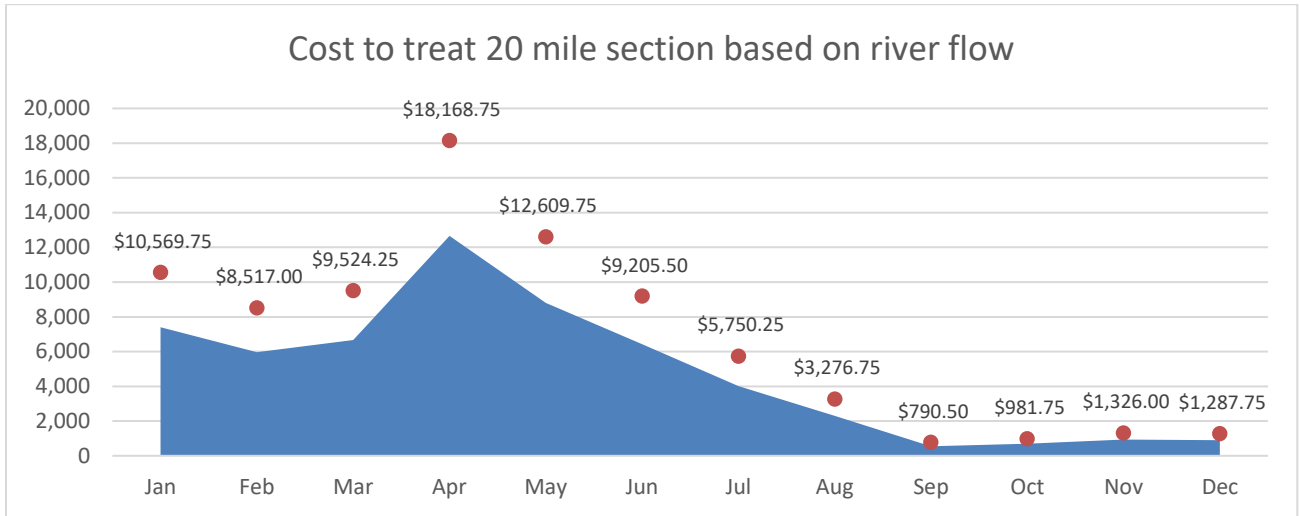


Figure 4 Cost to treat Snake River at Twin Falls based on Historical River Flows. Winter treatments take advantage of low flows to reduce cost and increase effectiveness.

*The Snake River is one of the largest overwintering habitats in our area, and by treating the river in the winter we are able to reduce the numbers of black flies that would otherwise colonize canals, which benefits the entire region. TFCPAD samples for larvae in the canal systems and treat when appropriate. By monitoring both BF larval stage and river flow rates we are able to time treatments to get the best control. The Snake River at Twin Falls depends a lot on what is happening upstream. In addition to irrigation flow releases, some water is released for flood control and salmon recovery. This all impacts costs to treat as well as Black Fly production in the region. Figure 4 shows cost to treat based on average river flows; in general there are great variations in flow that we can exploit and time treatments when it will cost us the least. At some flow levels treatment is cost prohibitive.

5.2 Mosquito

Mosquito larvae were controlled in several ways. Early in the season catch basins, storm drains, and some water retention ponds were treated using one of several slow release products. Altosid, Naturlar, and Four-Star products were all used. Products lasted from 45-180 days depending on the type of location treated. The slow release formula allows these early season treatments to last during the summer. These treatments are designed to work so that even when the water dries up the product remains ready for the

next time the catch basin fills with water. This treatment is ideal for storm drains where we do not have the man power to check and treat each one at intervals during the summer. Over 1,000 storm drains were treated in Twin Falls County by TFCPAD. In addition, product is supplied to the local municipalities to use for the retreatment of drains when they are cleaned during the summer. All products used in treatments are listed on the TFCPAD website tfcpad.org.

Additional mosquito larval control was conducted by the use of Bti and a *Bacillus sphaericus* biological larvacide applied to standing water when mosquito larvae were found present. Bs works in much the same way as Bti, it is a natural soil bacteria that is consumed by the larvae. The difference is that it is a live bacterial that when consumed it multiplies inside the mosquito gut eventually killing the mosquito. The mosquito gut ruptures and releases the bacteria for another larva to consume. In areas of high mosquito larva this recycling of the product can make this type of treatments last longer than Bti.

*Mosquito larval control technology has experienced incredible gains over the last 9 years, resulting in improved product formulations, slow release, and even products that release during a flood event, dry down and wait for the next flood event. These gains in technology have allowed us to treat an increasing number of mosquito sources (over 7,000), and find new sources each year without a similar increase in labor. We are able to pretreat with slow release bacteria products areas that have historically been problem areas.



Photo 6 Treating the river corridor by boat.

In some areas we use a surface film to treat for mosquitoes. The surface film is a monomolecular film that coats the surface of the water reducing surface tension, preventing pupa mosquitoes from emerging from the water. It can also plug a mosquito larva's breathing tube and suffocate it. The film is designed to break down rapidly, it is only used where we find pupa.

Photo 6, Applying granular larvacide to marshy and flooded areas.

5.3 Bluegill

*Stocking of Bluegill for mosquito larval control was continued this year. Bluegill were collected from Dierkes Lake. Many of the locations that received fish are seasonal ponds and will need fish every year. The fish have proven to be a valuable part of our Integrated Pest Management approach. As we stock more waters and have more locations to use as sources for fish this part of

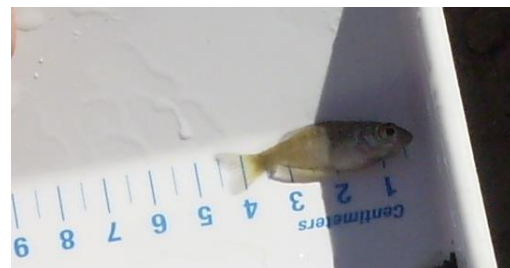


Photo 7 bluegill, 3-4 cm fish that can target mosquito larva are are ideal.

our program will expand. A number of volunteers helped with fish capture. Based on the public response, this is the public’s favorite part of our program. Our ongoing monitoring has shown that while Bluegill do not remove all the mosquito larvae, they remove a percentage of larvae making our other treatments more effective.

5.4 Pesticide use totals*

Total quantity is total product applied, not just the active ingredient. Product information can be found on district website.

TFPAD PESTICIDE USE TOTALS				
Product	EPA Reg. #	Quantity Used 2017	Quantity Used 2016	Quantity Used 2018
Four Star (45 day)	83362-3	287 each	329 each	38 each
Four Star (90 day)	83362-3	1,665 each	819 each	1487 each
Four Star CRG	85685-2	2,340.66 pounds	2,308.45 pounds	4,853.86 pounds
4 Star (180 day)	83362-3	2,377 each	2,916 each	6754 each
4 Star WSP	85685-3	none	111 pouches	none
Agnique (surface Film)	53263-28	1.1 galons	0	03 gallons
Agnique WSP (surface Film)	53263-3	36 pouches	134 pouches	43 pouches
CocoBear (larvicide oil)	8329-93	5.53 gallons	7.35 gallons	10.7 gallons
Altosid Briquet (180 day)	2724-421	none	1282 each	1685 each
Altosid WSP	2724-448	none	96 pouches	0 pouches
Vectolex WSP (BS)	73049-20	20 pouches	478 pouches	27 pouches
Vectobac CG (Bti)	73049-19	51.85 pounds	237 pounds	0 pounds
Vectomax GF(BTi,BS)	73049-429	1,377.25 pounds	2,591.51	987.16 pounds
Vectomax WSP	73049-20	none	132 pouches	NA
Naturlar (180 day)	8329-84	2,537 each	1,207 each	940 each
Naturlar Granular (30 Day)	8329-83	567.67 pounds	61 pounds	458.15 pounds
Vectobac 12AS(Bti)	73049-38	4,785.26 gallons	6,727.01gallons	14,948.15 gallons
All Pro MBG (Granular Bti)	7699-92	209.7 pounds	173.1 pounds	0 pounds
ATSB (adult sugar bait)	Exempt	108.93 gallons	43.625 gallons	61.64 gallons
Fourstar MBG	85685-3	Na	Na	323 lbs

TFCPAD has over 7,000 sites that are inspected and treated as need during the season. Each year new sites are added and some are removed as habitat is modified or eliminated. This number increased rapidly over the first years of our operation, but has now leveled off mostly due to the limits of time and number of employees. Total product use can also vary greatly due to rain events and temperature. Product mix changes to prevent resistance, as new products are developed, and conditions in the field.

6. Control of Adult Mosquito Populations

Our most effective control of adult mosquitoes is accomplished by controlling the larva.

*Control of adult mosquitoes through fogging was not conducted. We have an emergency aerial contract in place in the event aerial application is needed.

In some areas Attractive Targeted Sugar Bait (ATSB) was used to target adult mosquitoes. This was generally used as a buffer when mosquitoes were migrating from untreated areas into the county.

***6.1 Adult mosquito control research**

Remote monitoring of Traps

Traps are now currently available that record in real time the number of mosquitos entering the trap and transmit that data back where it can be viewed on the internet. While these traps do not currently speciate they are able to classify insects by size. Real time data without travel would be a great asset in our large county. We trialed one this season specifically to look at its ability to catch and count blackflies. It failed in its ability to accurately count black flies. It did however out perform our traditional mosquito traps by a big margin and accurately transmit mosquito data. It is now another tool we can use in monitoring.

Trap trials

The emerging virus threats such as Zika are being transmitted by day active species of mosquitoes. These invasive exotic mosquito species are becoming quite common in the southern part of the country. It is also possible that their range will continue to expand with seasonal outbreaks from imported mosquitoes in areas that wouldn't normally sustain a year-round population. Our current traps and methods of monitoring adult mosquitoes could easily miss some of these mosquitoes. In order to improve our early detection and treatment we trialed a variety of traps in 2017. The best results from our trial was a gravid trap. Female mosquitoes looking for a place to lay eggs enter and are unable to leave. Based on this result, we expanded our trial this past year with the goal of having a trap that we could put out that would require no care for 30 days. The traps performed well and caught mosquitoes. No exotics were caught. Seasonal use of these traps will now be part of our standard surveillance practices.



Photo 8 Gravid mosquito trap.

7. Certification

*Professional Applicator Licenses were maintained by all of our applicators. In-house training was conducted on defensive driving, water safety, ATV, CPR and First Aid, equipment calibration and use, emergency procedures for spills and insect identification. The water safety portion of our training

provides each employee practice in self rescues in a swift water environment. The following is a list of trainings and important meetings attended.

Jan 9 Twin Falls Canal Company meeting

Feb 6 Salmon Falls Canal Co Board meeting

Feb 26-March 3 American Mosquito Control Association

March 6 Idaho Environmental Health Association (speaker)

April 14th UT Mosquito Spring Training (speaker)

May 24th Honey Bee Awareness class. (speaker)

May 8 and 10th IMVCA spring training.

May 30 Mosquito training in Montana. (speaker)

June 12 71 Range association meeting

Various Local Government Emergency Planning meeting (LGIP) during the year.

8. Public Education and awareness

*The following is a list of educational events attended by TFCPAD :

April 28 Earth Day fair at CSI (Educational booth)

Oct 11-12 Keynote Speaker at 44th Annual Nebraska Mosquito and Vector Control Meeting.

Nov 9 Presentation of IPM to CSI Biology classes

Nov15 Tour of TFCPAD for intro Biology Students

Nov 30 Filer Middle School Career day



Photo 9 Career on wheels day (COW day)

Information is also available on Facebook, YouTube and website.

8.1 Links to TFCPAD related news stories: (click on link in blue) from KMVT and Times News

[Lincoln County man first confirmed West Nile case of 2018](#) *Posted: Wed 5:59 PM, Aug 22, 2018 / Modified: Thu 10:50 AM, Aug 23, 2018* South Central Public Health District confirmed a 39-year-old man as the first official case of the year in Lincoln County.

[Bluegill collected at Dierkes Lake to help fight mosquitoes](#) *Posted: Wed 5:44 PM, Aug 15, 2018 / Modified: Wed 5:55 PM, Aug 15, 2018* The Twin Falls Pest Abatement District collected blue gill from Dierkes Lake to help control the mosquito population.

[UPDATE: Mosquitoes carrying West Nile virus found in Gooding County](#) *Posted: Wed 1:01 PM, Jul 18, 2018 / Modified: Thu 9:12 AM, Jul 19, 2018* Officials have collected mosquitoes known to carry West Nile virus south of Hagerman and anticipated “virus-positive” mosquitoes are in surround areas.

[Pest abatement district ramps up mosquito testing](#) *Posted: Tue 5:58 PM, Jun 19, 2018 / Modified: Tue 7:40 PM, Jun 19, 2018*

[The College of Southern Idaho has a grant allowing students to do scientific research. Now, it's hoping for renewal](#) Sep 22,2018

9. Other Business

9.1 Board meeting Dates

All Board meetings were announced and open to the public. The following is a list of Meeting date

1/8/2018	6/11/2018	11/19/2018
2/12/2018	8/6/2018	12/10/201
3/12/18	9/10/2018	

9.2 BUDGET FOR TWIN FALLS COUNTY PEST ABATEMENT DISTRICT

11/9/2018

Twin Falls County Pest Abatement District
YTD Revenues & Expenses to 2017 Budget vs. Actual & 2018 Budget

Budget Categories	Budget Items	2017 Actual	2017 Budget	2018 Budget
Revenues	1-01 Taxes	633,615	618,000	606,614
Revenues	1-02 Grants	8,500	2,000	6,000
Revenues	1-02 Foregone	-	-	-
Revenues	1-04 Carryover Money Other	905,403	830,000	930,000
Revenues	1-03 & 1-05 Other Income	17,538	11,850	17,800
Total Revenues		1,565,056	1,461,850	1,560,414
Expenses				
"A" Budget	(Salaries & Wages)	93,335	132,200	158,180
"B" Budget				
Benefits & Taxes Total		39,335	67,200	69,440
Building Expenses Total		22,582	27,090	26,885
Other Insurance Total		1,183	3,400	3,400
Vehicles Total		39,293	20,200	19,900
Travel Total		2,505	6,000	6,000
Training Total		1,700	2,520	2,520
IT and Communications Total		10,126	7,020	7,210
Emergency & Carry Over		700,000	700,000	750,000
Emergency & Carry Over		205,403	108,250	109,529
Community Outreach Total		12,184	15,650	15,500
Integrated Pest Management Total		358,492	357,820	377,250
Administration Total		9,930	14,500	14,600
Total "B" Expenses		1,402,733	1,329,650	1,402,234
Total Expenses		1,496,068	1,461,850	1,560,414
Net Revenues over expenses		\$ 68,988	\$ -	\$ -

Actual Carryover from 2016	Net Revenues 2017	Carry over to 2018
\$ 905,403	\$ 68,988	\$ 974,391

9.3 Emergency Abatement Fund Policy

Twin Falls County Pest Abatement District
Emergency Abatement Fund Policy Position
January 7, 2016

The Twin Falls County Pest Abatement District is charged with protecting the health and welfare of the citizens of the county from pests and vectors which carry disease or which might have a negative impact on social and economic well-being of the citizens. The primary focus of the district's activity is to

proactively abate mosquitoes and black flies in the county before they reach numbers which could cause harm.

The district must, however, also be prepared to react to threats which are currently not an issue. To those ends, the district has worked to accumulate monies into an Emergency Abatement Fund. When the District was formed, there were no monies allocated to fund emergency abatement. The financial target for the Emergency Fund is approximately one fiscal year worth of tax collections. This amount should allow a reasonable and non-excessive response to an emergency. At the time of the district's formation it was decided that money should be set aside each year from a line item on the budget and that any unspent operating money should also be added to the fund, until such time that the budget target was reached.

Due to State of Idaho statutes for taxing districts, in order to make the Emergency Fund money available for use, the money in the Emergency Fund must be shown on the annual budget. The result of this is that the annual budget for the Abatement District rose steadily and significantly each year through 2015. It was anticipated that when the fund target was reached the district budget will be approximately two (2) times the annual tax revenue collection.

Through organized budgeting and spending discipline the Emergency Fund target was reached and for fiscal 2015 it was decided by the board to use the money that had been going into the fund for a second full time district employee. This decision will reduce the risk of institutional knowledge loss and provide better continuity of activities from one season to the next. Fiscally the goal now will be to efficiently abate and educate within the district to the extent possible with the tax monies annually collected.



Photo 10. 2018 Team Left to Right Brock Palen, Amanda Smith, Spencer Cowen, Maria Butori, Kirk Tubbs Christina Contreras,