



2021

ANNUAL REPORT

TWIN FALLS COUNTY PEST ABATEMENT DISTRICT

PREPARED BY

BRIAN SIMPER

TABLE OF CONTENTS

Introduction	3
Geographic Area	4
Collaborative Agreements	5
Surveillance	6
Black Fly Adult	6
Black Fly Larval	6
Mosquito Adult	7
Mosquito Larval	8
Disease Testing	8
Mapping	9
Source Reduction	9
Larval Control	10
Black Fly	10
Mosquito	10
Natural Predators	11
Pesticide Use Totals	12
Control of Adult Mosquito Populations	14
Certifications	15
Public Education	15
Other Business	17
Board Meeting Dates	17
Annual Financial Statement	17
Emergency Fund Policy	18



New water safety and rescue training for TFCPAD employees in the Highline Canal.

Board of Trustees:

Sherry Olsen-Frank, C.P.A., E.C.S., President
Cory Doggett, Secretary
Dan Henningsen, Treasurer
Don Morishita
Jeff Cooper

Ex-Officio Members:

Erik J. Wenninger, Ph.D. University of Idaho
Logan Hudson, South Central Public Health District

Cover Photo: Black fly habitat in Twin Falls County. Black fly habitat is moving water whereas mosquito habitat is stagnant water. The Twin Falls County Pest Abatement District works to control pests in both types of habitat.

Contact Information:

Mail:

PO Box AC
Twin Falls, ID
83303-0094

Office Location:

507 Grandview Dr S
Suite A
Twin Falls, ID, 83301

Phone/Email/Website

Office: 208-733-2338
manager@tfcpad.org
www.tfcpad.org

2021 YEAR END REPORT

Twin Falls County Pest Abatement District



INTRODUCTION

The Twin Falls County Pest Abatement District was created by public vote in 2008 and commenced an integrated pest management (IPM) program in the spring of 2009.

*The 2021 season turned out to be a very hot and dry summer for the Twin Falls County area (as well as most of southern Idaho). Due to the weather, a multitude of insects flourished this year, including mosquitoes and black flies. Surveillance yielded slightly than average higher trap counts.

*The 2021 staff consisted of one full-time manager, a full-time technician, and during the spring/summer three full-time seasonal employees and two part time interns.

The main goal of the Twin Falls County Pest Abatement District is to protect public health and socioeconomic well being of citizens of Twin Falls County from harmful vectors and pests. This goal is accomplished by striving to implement environmentally sound and economically reasonable abatement practices.

The District carries out a three point plan consisting of educating the public, source reduction of mosquito and black fly habitat, and environmentally safe treatments of pests that vector disease. Currently the two major disease threats to the county vectored by mosquitoes is West Nile Virus, and black flies is Vesicular Stomatitis Virus.

Geographic Area

The Twin Falls County Pest Abatement District primarily conducts integrated pest management practices and education inside Twin Falls County. The county contains approximately 1,323,000 acres. Twin Falls County has a population of 88,576 (2021 Census). Work done by the District is targeted to areas that will produce the best results for the time and money expended.

Pest habitat inside of the county is made up of water sources both moving water (black fly habitat) and stagnant water (mosquito habitat). These habitats are largely created by the Snake river (which flows along the northern border of the county), the Twin Falls Canal system of 110 miles of major canals and over 1,000 miles of laterals, the Salmon River Canal system of over 300 miles of main and lateral canals, and the Roseworth Canal system containing over 10 miles of main and lateral canals.

Additionally, portions of coulee drainage systems such as Rock Creek, Deep Creek, Cedar Draw, Dry Creek, and Salmon Falls Creek all create sources of pest habitat in the county.

Other canal irrigation systems that directly impact pest populations near Twin Falls County include the Milner Irrigation Canal, the Northside Canal, among other smaller systems surrounding the county.

Twin Falls County contains lakes, ponds, and other water collection areas that create mosquito habitat.

Priority in treating these habitats is directed to locations where historically West Nile Virus was found, denser populated

areas, and recreational or high public use areas.

Due to the mobility of pests targeted by the District, the Abatement Plan allows for treatments to be conducted outside of the county. In general, the Snake River is the dividing line for treatments, but a few areas in adjacent counties were treated due to their impact on Twin Falls County citizens.

Clear Lakes HOA and Blue Lakes Country Club both contracted with the District for mosquito control, which directly benefited the citizens of Twin Falls County.

Limited mosquito surveillance was conducted in Jerome and Gooding counties throughout the 2021 season. This provided some mosquito pools that were tested for West Nile Virus (WNV).

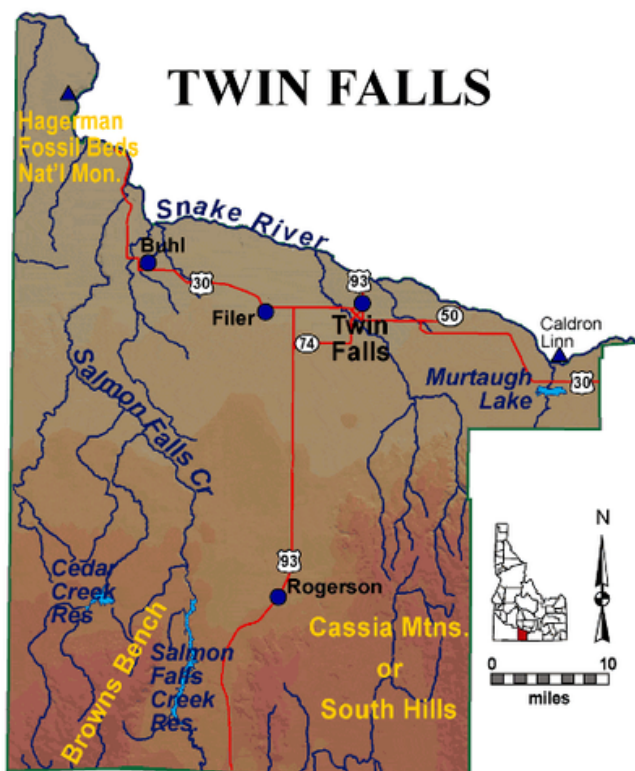


Image 1: Twin Falls County's major water systems.

Collaborative Agreements

The District welcomes partnerships and the sharing of information and resources in order to fulfill our mission. All parties worked with previously continued in assisting the District. Some of the more significant collaborators are noted.

Idaho Department of Health & Welfare provided lab supplies as well as funds for mosquito surveillance through a grant. This money was used to purchase new surveillance equipment, supplies, and to perform additional surveillance in surrounding counties for West Nile Virus. The State Lab also provided confirmative virus testing.

*The College of Southern Idaho and Idaho State University provided interns to the District funded by the INBRE and SARE Programs. These interns were able to complete research projects related to mosquito control and disease testing.

The Twin Falls Canal Company, Salmon Falls Canal Company, 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.

Salmon River Canal Company has been engaged in lining sections of their canal system to help increase water use efficiencies. The District is helping to fund some of these efforts as the long-term results will be less black fly and mosquito habitat to treat and cost savings to the

District.

*This year, the District contributed \$4,000 to a specific section of canal and laterals that will be piped to eliminate loss of water due to leaks or blow outs.

Clearlake's HOA 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.

Tubbs Berry Farm collaborated with the district to present an educational workshop for members of the community at their Spring Bee Day, and Fall Pumpkin Patch event.

The District worked closely with city street departments from Buhl, Filer, Twin Falls, and Kimberly sharing information related to habitat sanitation in storm drains. Collaboration was also done with Twin Falls City and County Parks Department on adult pest activity.

*Jerome County contracted with the District for winter black fly surveillance and treatment. Sites along the Milner-Gooding Canal were inspected and treated. This agreement has benefited both counties because black flies have a flight range of 10-20 miles.

Surveillance

Black Fly Adult

Black flies (BF) are also commonly referred to as biting black flies, or buffalo gnats throughout the county. Adult surveillance of BF is conducted using EVS All Weather Light Traps with carbon dioxide attractant. 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 to reduce the potential for transmitting Vesicular Stomatitis Virus (VSV). In Idaho this year, VSV was not detected.

Simulium vittatum is the predominate species of BF found throughout the county. This species does not generally bite humans; it prefers to feed on livestock, and is a concern for its potential to transmit disease and its negative effect on livestock behavior. When people notice BF 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*. One distinct characteristic of the *Simulium bivittatum* is that it bites both people as well as livestock. This species is smaller, and therefore harder to see.

Locals often refer to this species of BF as no-see-ums. Populations of *bivittatum* are generally more numerous on the west side of the county.

*This year, black flies populations were higher than the past two years due to warmer water temperatures that allowed for faster emergence from egg to adult. Migrating black flies were also observed in trapping surveillance.



Image 2: Black fly size comparison to a penny.

Black Fly Larval

Surveillance for black fly larvae in canals is done by hanging yellow sample ropes from bridges. A six inch section is marked on the rope and larvae found on that section were monitored. Other waterways were also monitored by pulling up vegetation and rocks to observe for larval presence.

Surveillance

Black Fly Larval (cont.)

In fluctuating river and stream flows, BF larvae relocate often, searching out the optimal attachment sites. Frequent relocation renders rope surveys less effective. Some waterways are surveyed year round, and surveillance of larvae is done to gauge instar stage and growth so treatment can be conducted where needed and at the optimal larval stage for control.

Mosquito Adult

*Adult mosquito trapping was conducted on a weekly basis during the season (April-October). All Weather LED EVS Traps with carbon dioxide attractant were primarily used for general surveillance. Traps were set in the evening and collected the following morning. A total of 305 trap nights were recorded, producing a total of 3691 female mosquitoes that were identified to species as part of the surveillance.



Image 3: Lab technician speciating mosquitoes.

Trap results were used to identify areas of concern and conduct treatments. *Culex tarsalis* and *Culex pipien* mosquitoes identified from trapping were tested for West Nile Virus (WNV). Mosquito testing was conducted in-house with confirmation of test results conducted by the State Lab.



Image 4: Technician setting an EVS trap.

*A new disease surveillance method was employed using honey cards inside of traps that mosquitoes could feed on. The saliva from mosquitoes that fed on the honey could be PCR tested for WNV. This method is utilized in Australia and has been tested in a few areas in the USA. The study was conducted with assistance from the CDC, and performed by the District Manager, an ISU SARE Intern, and the U of I Laboratory in Hagerman, ID. Honey card sampling for disease presence in mosquitoes has some benefits and disadvantages that are more fully covered in the District's Honey Card Study.

Surveillance

Mosquito Larval

Surveying for mosquito larvae is done by dipping for larvae in standing water sources such as ponds and water retention areas. A mosquito larva is commonly referred to as a wiggler, for the way it moves through the water. Both larvae and pupae can be surveyed by dipping. Results from dipping directly dictates whether treatment is needed or can be postponed.



Image 5: Mosquito larvae resting near the surface.

West Nile Virus Testing

West Nile Virus (WNV) is considered endemic in Idaho. The District's goal is to reduce the likelihood of virus transmission by limiting the primary vectors in Twin Falls County- Culex tarsalis and Culex pipiens mosquitoes.

This year 162 pools of mosquitoes were tested in-house as part of routine surveillance. Each pool tested contained 1 to 50 mosquitoes of the Culex species from one trapped location. The District 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.

*WNV in Twin Falls County was detected in the District Lab on August 10, 2021. Gooding County had two detections of WNV this year by the District Lab.

Species identification also indicates what type of habitat could be found in the field. Most nuisance species are found in flood water pastures while most vector species are found in permanent water sources.

Culex tarsalis are most often found in ponds and permanent water sources. Culex pipiens are typically found in small containers and storm drains that hold water.

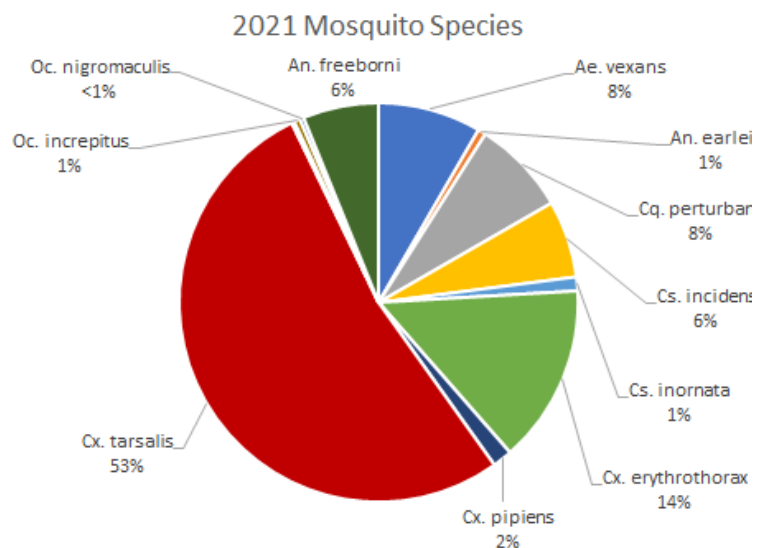


Image 6: Mosquitoes by species in Twin Falls County

Mapping

FieldSeeker is the geographic information system (GIS) software used by the District to provide accurate records of habitat locations, and treatments applied. Data collected is reviewed each year to correlate trends and possible future events. This system preserves knowledge from year to year allowing new personnel to adapt quickly.

*This year, the team was able to use a query tool in FieldSeeker to increase logistical efficiency in the county.

Source Reduction

The most consequential long-term impact toward source reduction is through education. Educational efforts to reduce potential pest habitat is an important part of the District's IPM plan. Education is done one on one with homeowners, speaking to groups, or working with schools. District personnel cannot find every source in the county, but when landowners know what to look for, they can help immensely by draining or flushing stagnant water.



Image 7: TFCPAD presenting to local schools at Rock Creek Park.

*The District helped promote two Tire Amnesty Days (May 1st, and October 2nd) facilitated by Southern Idaho Solid Waste. Educational efforts by the District encourages the public to dispose of old tires that could potentially become a habitat for mosquitoes.

Other educational public service announcements were produced and aired during the summer months on social media, local radio, and television stations.



Image 8: Large pile of mosquito habitat also known as old tires.

Tires are excellent producers of mosquitoes, especially exotic species such as *Aedes aegypti* that are capable of transmitting the Zika Virus.

Larval Control

Almost all control efforts focused on 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 equivalent to 72,000 acres of adulticiding (Valent 2013). There is no efficient method to control BF adults without treating a large geographic area.

One mile of fast-moving water in a river or large canal can produce over 1 billion BF per day; hence it is best to treat the source.

The primary larvicide used is *Bacillus thuringiensis* v. *israelensis* (BTi) is a product of a natural soil bacteria. Other larvicide products used by the District similar to BTi is *Bacillus sphaericus* (Bsph) and Spinosad. Methoprene is a juvenile growth hormone specific to the fly family of insects. These products have little to no effect on non-target species and do not persist in the environment.

Black Fly

Black fly applications treat the volume of water. BF reproduction continues even during the winter. Larvae grow slowly but have a special adaptation that allows them to emerge as adults and immediately lay eggs without feeding or mating during warmer winter days. Although BF populations don't grow drastically over winter, it allows for the early colonization of areas when spring comes.

During the winter, most canals are dry so overwintering habitat is limited. The

concentration of BF larva in select water systems allows winter treatments to be very effective at a lower cost than spring and summer treatments.

The Snake River is one of the largest BF habitats in our area. The cost of treating BF larvae is directly correlated to water flow.

Most years, the Snake River releases a high volume of water during the Salmon Water Release (first week of May to the first week of June) and for Idaho Power to produce more electricity (first week of July to mid August). Due to dry conditions, the river volume aside from these two events were minimal. Treatment quantities are directly related to the volume of water, and so less VectoBac 12 AS was needed overall for this year's treatments. Due to high summer temperatures, black flies were still observed although their habitat was limited.

Flight range for BF adults is 10-20 miles. Although winter treatments and actively treating in the spring and summer wipes out most BF in Twin Falls County, BF can still migrate from untreated neighboring counties into Twin Falls County.

Mosquito

Mosquito larvae were controlled in several ways this year. Early in the season, catch basins, storm drains, and some water retention ponds were treated using one of several slow release products that last from 45 - 180 days depending on the type of location treated.

Larval Control

Mosquito (cont.)

The slow release formula allows these early season treatments to last during the summer. Even when 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 storm drain at monthly intervals during the summer.

*Over 2,400 storm drains were treated in Twin Falls County this year. Due to new construction, there was 20% increase in storm drains to be treated across the county.

*CSI's INBRE Intern conducted a study of the efficacy of different larvicide products that the District employs for mosquito control. The graph below illustrates the intern's findings. More information can be found on the District's website, www.tfcpad.org

Product Used	Males	Females	Male %	Female %
Control	3	29	100%	100%
FourStar CRG	5	7	+67%	-76%
FourStar 180	3	2	0%	-93%
MetaLarv SP	3	1	0%	-97%
Natular G30	2	1	-33%	-97%

Image 8: Graph indicating average adult emergence sampled from various locations across the county.

Natural Predators

Stocking of bluegill for mosquito larval control continued this year. Bluegill were collected from Dierkes Lake and distributed to ponds across the county. Many of the

locations that received fish are seasonal ponds and will need to be restocked on a yearly basis. The fish have proven to be a valuable part of the District's IPM approach.

*This year, volunteers were invited to help with fish collection. Volunteers helped the District net, identify, measure and count bluegill from Dierkes Lake.

KMVT and KSAW covered the event of collection and stocking so that people in the community would be aware of the District's efforts.

*Under the Idaho Fish & Game permit, the District was able to collect 960 bluegill and stock them in ponds across Twin Falls County.



Image 9: TFCPAD collecting bluegill at Dierkes Lake.

Larval Control

Pesticide Use Totals

Product	EPA Reg #	Quantity Used 2019	Quantity Used 2020	Quantity Used 2021
Agnique MMF	53263-28	none	none	0.68 gal
Agnique MMF G PAK 35	53263-30	none	none	240 packet
Altosid Ingot XR Briquet	2724-421	2,167 briquet	2,689 briquet	240 briquet
Altosid P35	89459-95	none	35 lbs	1743.1 lbs
ATSB Terminix	N/A	2.9 gal	8.65 gal	2.19 gal
Cocobear	8329-93	1.06 gal	3.24 gal	2 gal
Final Feed Mosquito Bait	N/A	none	none	1.25 gal
Four Star MBG	85685-3	382.34 lbs	147 lbs	266.5 lbs
FourStar 180	83362-3	3,361 briquet	5,005 briquet	3,808 briquet
FourStar 45	83362-3	3 briquet	none	46 briquet
FourStar 90	83362-3	340 briquet	62 briquet	413 briquet
FourStar CRG	85685-2	4,839.43 lbs	3,280.59 lbs	2,262.46 lbs
MetaLarv S-PT	73049-475	40 lbs	1,119.97 lbs	1,162.55 lbs
MetaLarv XRP	73049-475	none	none	505 briquet
Natular G30	8329-83	172.85 lbs	209.85 lbs	208.55 lbs
Natular XRT	8329-84	161 briquet	130 briquet	3,132 briquet
Stop the Bites	N/A	none	none	2.39 gal
VectoBac 12AS	73049-38	11,063.82 gal	8,741.19 gal	7,645.01 gal
VectoMax FG	73049-429	1,414.2 lbs	2,057.71 lbs	1,038.99 lbs
VectoLex WSP	73049-20	none	731 packet	none
VectoPrime FG	73049-501	none	none	232.61 lbs

The active ingredients in products used by the District include *Bacillus thuringiensis* subspecies *israelensis* (BTi), *Bacillus sphaericus* (Bsph), Spinosad, Methoprene, mineral oil, and garlic. BTi, Bsph, and Spinosad are all biologically derived from

naturally occurring soil bacterium that causes mortality to mosquito larva after ingestion. BTi is used specifically for black fly control, causing larval mortality after ingestion.

Methoprene is an insect growth hormone

Larval Control

regulator that mimics the juvenile growth hormone of mosquitoes, not allowing them to fully develop into adults. Mineral oils cause suffocation of mosquito larvae and pupae and are selected because they break down quickly in the environment. Garlic is microencapsulated in a sugar bait. When ingested by mosquitoes, the garlic acts as a gut toxin.

*Stop the Bites, a new barrier spray product used by the District, yielded good results in reducing adult mosquitoes. Stop the Bites is made up of lemongrass oil, cedarwood oil, castor oil, corn oil, geraniol, and sodium lauryl sulfate. This product has been found to also control ticks and other pests.



Image 12: Mosquito larval habitat due to poor drainage.

Larvicide selection depends largely on the mosquito larval habitat. Some habitats are permanent (i.e. lakes, and ponds) and all larvicides used by the District can be used on these types of habitats. Other habitats such as livestock troughs,



Image 13: Livestock troughs produce thousands of mosquitoes.

pastures, seeps, and some marshes transition from dry to wet several times throughout the summer and only larvicides that have the ability to dry down and become active again when water is present are preferred for these types of habitats.

A key to integrated pest management is being able to use the right tool for the right pest/habitat. The District strives to use as many tools as possible that are environmentally safe to control mosquito populations and to limit potential disease transmission.

Control of Adult Populations

Adult Mosquito Control

The most effective control of adult mosquitoes is accomplished by controlling the larvae. Control of adult mosquitoes by fogging was not conducted. The District has an emergency aerial contract in place in the event that aerial adulticiding is needed.

In some areas, Attractive Targeted Sugar Bait (ATSB), Final Feed (similar to ATSB) and Stop the Bites were used to target adult mosquitoes. These products were generally used as a buffer when mosquitoes were migrating from untreated areas into our county.

Gravid traps are employed by the District to monitor and capture the emerging *Aedes aegypti* which vectors Zika Virus. This is the third year that the District has used Gravid traps. The traps performed well and caught mosquitoes. No exotic species were found.

The majority of the District's trapping is done with All Weather LED EVS (Encephalitis Virus Survey) Traps. These traps use light and carbon dioxide (dry ice) as attractants. A fan pulls the mosquito into the net and maintains it until collection. 10 - 35 traps are set per week for surveillance.

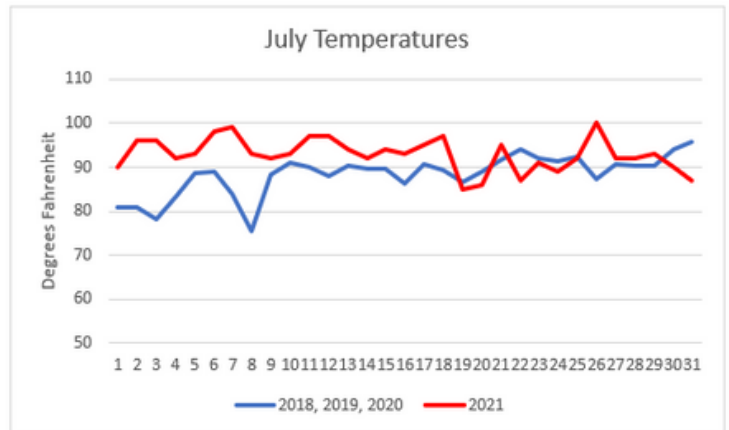
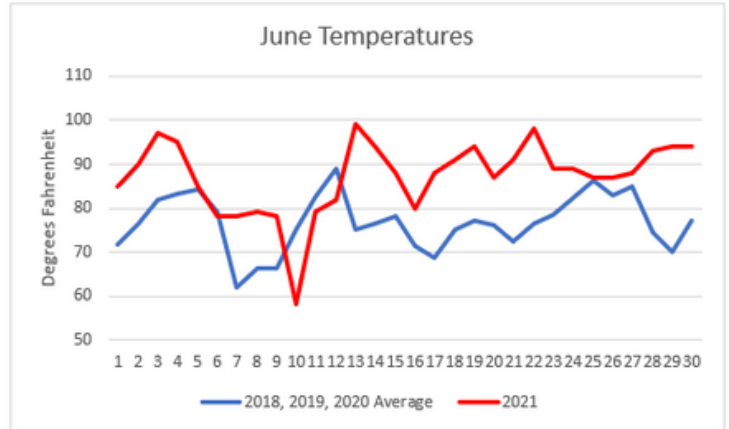


Image 14: A summer of high temperatures produced a lot of mosquitoes. Temperature = y axis, days of the month = x axis.

*A new BG Yeast producing CO2 trap was employed and very successful. The yeast formulation has multiple types of yeast in order to produce CO2 for 10-16 hours.



Image 15: BG Sentinel Trap



Image 16: Gravid Trap



Image 17: EVS All Weather

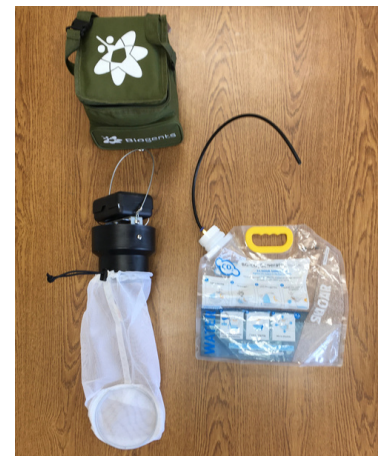


Image 18: BG Yeast Trap

Certifications

Professional Applicator Licenses were maintained by all applicators. In-house training was conducted on defensive driving, water safety, ATV, equipment calibration and use, emergency procedures for spills and insect identification. The water safety 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 19th - Wetland Management Training Webinar (Online)

Mar 3rd-5th - American Mosquito Control Association Annual Meeting (Online)

Mar 22nd - Valent Catch Basin Training (Online)

Mar 31st - Idaho Mosquito Vector Control Association Meeting (Online)

Apr 12th - Leading Edge Aerial Technologies Inc. UAS Flight Training (Pocatello, ID)

May 19th - Idaho Mosquito Vector Control Association Training (Online)

May 20th - Canal Safety Training (Twin Falls, ID)

May 27th - Water Safety Training (Hagerman, ID)

Jun 24th - Idaho State Department of Agriculture Pesticide Credits Seminar (Twin Falls, ID)

Oct 19th-20th Valent Drone Characterization (Twin Falls, ID)

Nov 10th - FAA UAS Licenses renewed

Nov 17th - Idaho State Department of Agriculture Aerial Applicators License Obtained

Public Education and Awareness

The following is a list of educational events attended:

Jan 11th Jerome County Commissioners Mosquito & Black Fly Presentation (Keynote Speaker)

Feb 22nd CSI's Geographic Information Systems classes presentation (Keynote Speaker)

Feb 25th CSI's Biology classes presentation (Keynote Speaker)

Mar 18th CSI' Environmental Science classes presentation (Keynote Speaker)

Apr 9th KLIX Radio discussed the District's IPM Goals (Twin Falls, ID)

May 1st Tire Amnesty Day (Twin Falls County)

May 11th S&W Conservation District School Presentations - Stricker Ranch (Keynote Speaker)

May 25th S&W Conservation District School Presentations - Rock Creek (Keynote Speaker)

May 28th West End Men's Club (Keynote Speaker)

Jul 14th Bluegill collection and stocking (Twin Falls County)

Aug 30th CSI Drone Class Demonstration (Keynote Speaker)

Sep 3rd Twin Falls County Fair Drone Demonstration (Keynote Speaker)

Certifications

Links to TFCPAD related news stories from TFCC, KMVT, and Times News

<https://kool965.com/get-rid-of-mosquitoes-on-twin-falls-tire-amnesty-day/> Help Get Rid of Mosquitoes on Twin Falls Tire Amnesty Day. Posted April 26, 2021

<https://www.kmvt.com/2021/04/29/twin-falls-tire-amnesty-day-aims-to-help-curb-mosquito-population/> Twin Falls Tire Amnesty Day aims to help curb mosquito population. Posted April 28, 2021

<https://www.kmvt.com/2021/06/18/preventing-mosquitos-during-summer-months/> Preventing mosquitoes during the summer months. Posted June 18, 2021

<https://www.kmvt.com/2021/07/14/twin-falls-county-pest-abatement-district-uses-fish-control-mosquitoes/> Twin Falls County Pest Abatement District uses fish to control mosquitoes. Posted July 14, 2021

<https://www.kivitv.com/ksaw/noticing-more-mosquitoes-heres-why-more-might-be-around-this-year> Noticing more Mosquitoes? Here's why more might be around this year. Posted July 14, 2021

https://magicvalley.com/news/local/west-nile-found-in-gooding-and-twin-falls-counties/article_34f982fa-0ca2-566c-a90d-e35e41170233.html West Nile found in Gooding and Twin Falls Counties. Posted August 11, 2021

<https://www.ktvb.com/article/news/health/west-nile-virus-confirmed-in-two-magic-valley-counties-gooding-twin-falls/277-308d9a2f-1f93-4b02-93fc-583069917476> West Nile Virus confirmed in two Magic Valley counties. Posted August 11, 2021

Other Business

Board meeting Dates

All Board meetings were announced and open to the public. The following is a list of Meeting dates in 2021.

January 11, 2021 March 8, 2021 April 26, 2021 June 7, 2021 June 14, 2021
 August 16, 2021 September 13, 2021 December 6, 2021

Budget

	Original Budget	Final Budget	Actual	Variance with Final Budget: Favorable (Unfavorable)
Revenues:				
Property taxes	\$ 649,000	\$ 649,000	\$ 673,443	\$ 24,443
Abatement services	31,500	31,500	23,025	(8,475)
Grants	2,000	2,000	9,900	7,900
Interest income	3,000	3,000	2,508	(492)
Total revenues	685,500	685,500	708,876	23,376
Expenditures:				
Integrated pest management	452,035	452,035	395,400	56,635
Administration	14,500	14,500	9,308	5,192
Salaries & wages	132,000	132,000	124,851	7,149
Payroll taxes & benefits	58,605	58,605	45,417	13,188
Building expenses	27,280	27,280	23,406	3,874
Insurance expenses	2,900	2,900	2,645	255
Vehicle expense	53,800	53,800	48,680	5,120
Travel	4,950	4,950	27	4,923
Training	3,670	3,670	1,304	2,366
IT & communications	11,510	11,510	9,724	1,786
Community outreach	17,650	17,650	13,156	4,494
Total expenditures	778,900	778,900	673,918	104,982
Other financing sources (uses)				
Transfers in	-	-	-	-
Transfers out	-	-	-	-
Proceeds from long-term debt	-	-	-	-
Proceeds from the sale of capital assets	-	-	-	-
Excess (deficiency) of revenues over expenditures and other sources (uses)	(93,400)	(93,400)	34,958	128,358
Fund balance - beginning	1,086,303	1,086,303	1,086,303	-
Fund balance - ending	\$ 992,903	\$ 992,903	\$ 1,121,261	\$ 128,358

Other Business

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 that could cause harm. The district must, however, also be prepared to react to threats that 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.



Image 19: Left to right- Jafina Tubbs, Brian Simper, Angelica Camacho, Tiffaney Jeske, Adam Clapier, Tanner Henke, Brock Palen.