# Partial status report on Vermont's TIC program in the time of COVID-19

Prepared by Joe Mark, VTTIC lead facilitator March 26, 2020

All the following reports were received on 3/26/20

### **Shanna Moyer, Randolph Union High School**

We released our fry into Ayer's Brook. There is no one at the school and I don't have any way to care for them at home.

#### Colleen O'Brien, Williston Central School

Aron and I are still holding off on an early release. The fry are doing fine, all feeding and at large in the tank. Aron gets to school each day to feed and check on things. We haven't been told yet, that there will be no access to school, and since Aron lives right next door, we decided to keep them going.

# Melissa Muzzy, Vergennes Union High School

My trout are doing okay. I checked on them yesterday. The maintenance staff is caring for them as I am only allowed into the school once a week. My plan is to release them when they get a little bigger.

# **Chris Franske, Tunbridge Central School**

I ended up releasing the trout into the first branch yesterday. They were shutting down the school and no one was going to be allowed in that wing of the building, only in the kitchen area.

This was my first year doing TIC, and it was a great experience. We were able to watch development and see the heart beating and blood cells flowing under the microscope. We learn about water chemistry, and kids keep data tables. This was valuable and I will be excited to do this again next year.

## Lisa Dragon, White River Valley High School

I got permission to continue coming in to feed the trout at WRVHS. All well so far.

# Amanda Burnham, Mary Hogan School

The team at Mary Hogan Elementary School left the trout in the hands of our wonderful custodian staff. They wanted to care for the fish while teachers and students are out of the building. Everything is going well!

#### Nate Poore, Missisquoi Valley Union High School

The trout are happy and healthy in our classroom tank. Still getting daily feedings and already bigger than at this time last year!

# Angela Selvaggio, Harwood Union Middle School

Fish are doing well! I have some help from custodians with feeding and equipment upkeep. We lost some fish (maybe 20?) in a filter mishap on 03.17. I'm waiting to hear more about building access and extended school dismissal dates. My rough plan is to squeak the fish through in the tank as long as possible, and then release when it becomes impossible to support their survival in the tank!

#### **Melinda Carpenter, BFA - Fairfax**

Thanks for checking in! I am able to have the fish feed by our custodians for the time being and can spread out the feeding schedule. Once again, my fry are quick big and eat quite a bit. How much should they be getting every 3 days, measured in teaspoons unit?

Also, in expectation of an early release, I have the temperature down to about 48 degrees. I can get the custodians to feed and vacuum them, but probably not do and record the testing. As long as I have been able to vacuum regularly, my numbers have been pretty good.

# Kelly Hill, Essex High School

I hope you are doing well. Erin Bessy took our trout to her house because she had an empty 40 gallon tank there. We are fortunate that we were able to relocate them.

### Jesse Wolfe, Williamstown Middle/High School

Mine are still in my class. We have administrators that are in the building through next week at least and one of them offered to look after the trout. If it comes to it I may have to release them early, but we're taking it day by day.

# Tiffany Tucker, Elm Hill School

Trout are doing great! Safe in my basement in the company of my 10 year old

#### Kathy Clark, Shaftsbury Elementary School

Our tank is well and the fish are eating. Right now we still have janitors allowed in the school to feed them. I am also there periodically for feedings. So far so good.

#### Emma Vastola, Mount Holly School

My fish were doing well, the last time I checked on them was Saturday...from Monday on the Custodian in our school was feeding them. I plan to go in over the weekend or early next week, but need to get prior approval first, to check on them and let them out of the breeder baskets.

#### Maureen Rowe, Stockbridge Elementary School

The trout are doing GREAT! They traveled to my apartment last week. The fry are definitely doing LOTS of swimming. I still have them in their baskets and hoping to release them into the big tank either tomorrow or early next week. I have updated teacher website to include a blog and some videos.

#### Amie Fisher, Browns River Middle School

Due to our custodians being unable to feed our fish at Browns River Middle School, Lisa and I set our fry free into the Browns River yesterday. I was able to release 100 fry into the river! I wrote down all the specs, i.e., river temp, tank temp, and overall loss rate from this year. We were sad to see our fry go and without our students there to see them off, but it was the safest decision at our school. Let me know if you have other questions or information you want to pass along at your Zoom meeting.

#### Joseph Frigo, Riverside Middle School

I had to do an early release of our trout. Unfortunately, I could not bring them home with me, nor did I have the time to prepare for such a task. I made a few videos that I will attach here and students are currently working on writing an Opinion Essay about whether or not they think the trout will survive. The kids were a bit sad to hear that they had to be released early, but have been doing a good job with the essay and starting their online learning this week.

Feel free to share the videos if you would like. I used these to get the kids started on their essay assignment.

TIC Video 1: <a href="https://www.youtube.com/watch?v=Aq1xZ5p4160">https://www.youtube.com/watch?v=Aq1xZ5p4160</a>

TIC Video 2: <a href="https://www.youtube.com/watch?v=V7acJgsC9F8">https://www.youtube.com/watch?v=V7acJgsC9F8</a>

TIC Video 3: <a href="https://www.youtube.com/watch?v=qy-1185zhyE">https://www.youtube.com/watch?v=qy-1185zhyE</a>

# **Emily Hunter, Mount Anthony Union Middle School**

I moved my fish to Amy Newbold's tank on Tuesday. We are now thinking an early release might be necessary. I walked to the Furnace Brook which is fairly swift and is 38 degrees. We will see!

#### **Danielle Liquori, West Rutland School**

My tank and fry are being tended to by one of our custodians. He said that they are doing well and sent me a video where that seems to be the case. I left him enough testing supplies to last all the way through April at least, and he knows how to contact me if any problems arise.

#### Dave McNally, Winooski High School

I checked on my fish yesterday - all good. No loses. Healthy feeders. I am releasing them from the basket into the larger tank next week.

Not sure about the release project as the school year is in complete flux. We did get an approval letter from VT FW with 3 streams to choose from which was going to be the focus of my class's research and final work.

#### Matt Buck, Marion Cross School

We still have quite a few fish, 102 of 110, including the conjoined one. As feedings began just as school was closing it's been a bit tricky. My administrator and custodial staff are the only ones allowed in the school. They've been great and are feeding and updating our google doc regularly (temp, losses, feeding times). We are going to reassess how to move forward early in April. Robb C. has considered taking the tank and I've another family that would like to have them also. I simply do not have the space in an already small home for the tank with my wife and I both working from home and also homeschooling a 4yo. Crazy times. My other consideration is to simply release them via a recording for kids to see in early-mid April.

### Karli Love, Dorset School

At Dorset- our fish are still in the tank in my classroom. Custodial staff have been checking that the equipment is running and feeding them daily. Due to new restrictions- I only have minimal access to the classroom. I have been cleaning tank/changing water/water testing/dosing chemicals whenever I can get into my room. I had a die-off of about 15, last Thursday and then lost another 20 yesterday. I no longer use gravel rocks at the bottom and I've found it much easier to maintain. Also- all fish are out of breeder basket.

At this point, I plan to keep them at school as long as I can- my family and I are discussing moving them here (worried about electric to run equipment). Otherwise, Suzanne Alfano and I have been chatting- it seems she has a friend that took hers and may be willing to take mine if need be. Otherwise- considering early release. Hope you're well.

#### Colby Hescock, Rutland Town School

I've been able to access my school and keep up with the trout and tank maintenance! We lost several in the last few days, but I believe these are the ones who aren't surviving the 'swim-up' stage. I've gone in every other or at least every 3 days to feed the fish and check on everything. They're finally just about all out of their basket swimming freely in the tank. Do you recommend keeping the insulation covers on or off during the times I'm away? I've been leaning towards leaving it uncovered more often than not. My plan as of now is to stick with the program plan but that may change if I start losing a drastic amount of them.

# Allison Greene, Woodstock Elementary School

I was going to keep our fish going in the classroom but we just found out that our building was closed and we would not be able to get in (they said they would report us.....which put a damper on my plans to sneak in!). I figured the trout would have the best chance if we let them go...we let them go into the Brook near our school: ( Up until that point we had about 100% survival. It was sad because they seemed to be doing so well. Thanks for all your help and support.

### **Eric Anderson, Chelsea Public School**

Chelsea TIC was going very smoothly before school closure. Lost about 10 eggs/alevin early on. No losses since a few poorly developed alevin went before Feb Break.

Fry are currently free from breeder baskets and feeding voraciously. Head of maintenance is feeding and checking water quality for me.

#### Matt Kolb, Red Fox School

Our school was closed and sprayed. No one allowed in the building. I released the fish last Monday into the Battenkill. Best alternative. Cross your fingers.

# **Erin Paquette, Waterville Elementary School**

I got a message Monday stating my building was going to be locked down and we were no longer allowed in, including custodians. I had arranged a deal with my custodian to share data collection and feeding. I had been lowering my temp in anticipation of a quick release so I went in on Tuesday and emptied the tank. I am so bummed but I didn't want them to die in the tank. We had only lost 3 up until the release. I did see quite a few swim off in the brook, so I'm hopeful.

### Val Calzini, Bingham Memorial School

In Cornwall, our building is closed with no entry. My worry about water chemistry and sanitizing agents led me to spend the previous days adjusting the temperature to get the fish really fed and used to the cooler temp. I took my own kiddos out yesterday and we filmed a virtual field trip for my class.

The fry looked vigorous and were actually almost the same size as the ones I released last year later in the year! We found a nice quieter area to release them and they handled the current quit nicely! <a href="https://youtu.be/w6xaUWwxMpI">https://youtu.be/w6xaUWwxMpI</a>

# Cynthia Fortin, Northfield Middle/High School

So far the custodians have been feeding them. They are healthy and in the big tank now and no big die off this year! With this new mandate from the Governor, I am not sure if the custodians will be attending to the fish. I will keep you posted.

# Paul Legris, Cambridge Elementary School

My fish are alive and well the janitors are feeding and caring for them. I might need to release on my own if we don't go back to school before the end of May. I took in Colleen's fish and will video the release when it happens.

### Suzanne Alfano, Maple Street School

Our trout have been moved home with our math teacher. She is able to move the entire tank to her home so that was the best option given that we no longer are allowed to be in the hallways at school. I have copied her on this email. I am going to scour the manual today, I have never done a complete over haul only partial water changes. Obviously we can't precycle it: (Let me know if you have any tips.

#### Sarah Kaltenbaugh, Academy School

One of Academy's teachers took our trout home and started a tank in his basement!

### Judy Elson, Ferrisburgh Central School

My fry are doing well. I am going in and feeding and cleaning every 5 days as my school gave me permission to do so. Bob my contact person said that would be good. We have only lost a total of 7 fish from egg to fry stage. Still hoping we will be able to do a release in June with the kids!

### Colleen Legris, Founders Memorial School

Founders Memorial fish have been moved in with Cambridge Elementary School's fish tank. My husband is responding to your email right now. <a href="https://youtu.be/waFGpESitrs">https://youtu.be/waFGpESitrs</a>

### Erin Carr, Hyde Park School

Same here - I made a video of an early release to share with my kids at some point in the future.

### **Sue Haviland, Maple Street School**

Hi Joe - My husband is John Schneble who has met with you. He is so excited to have the fish at home. They did well last night and the temp is holding steady at 54. The ammonia was at 0.5 this morning so I changed out a 1/2 gallon out of the 5 gallon bucket they are currently in. We plan to move the tank in the next couple of days. Is there urgency to moving the big tank? We are happy to help and looking forward to this.

#### Lisa Marks, Ludlow Elementary School

The fish are thriving! I didn't hit reply all but feel free to share with everyone if you want to. We have 90 trout!!!!! I took a video yesterday when I went in and fed them. I'm the only one that is able to go in the building beginning today and go in with gloves on and the custodians have to doors open in a way so I don't have to touch anything. Our school is now completely off limits until April 15th as of yesterday.

I shared the video with my class this morning and they were so happy. We had a great discussion over Zoom about all the changes we have noticed since we left. It's of course not exactly the same but it's the next best thing. I fed them in the video too so they got a nice look at them eating. It will be time to release some of them into the

tank next week and I'm guessing a few of the smaller ones will remain in the basket. I'm thankful they are doing well and the kids are still excited about them. They keep asking about releasing them and the plan is to still have a release...I'm remaining optimistic and hopeful!

### **Guy Merolle, Castleton Village School**

The short response is I released my trout. Here are some videos that I shared with the students, as sadly they were unable to attend the day that we had planned to do the release together, and our return to school is uncertain.

https://youtu.be/jAh6cEEv8R8 https://youtu.be/UNzSGU94ppA

#### Paul Brown, BFA-St. Albans

As much as it pains me to say it, the trout were released yesterday into the Brewster River in Jeffersonville, VT (which was our designated release site all along). As the governor's shelter in place edict took hold, our school (BFA St. Albans) basically shut off access for all staff except custodial, who are in the process of doing deep cleaning throughout (when that is complete, they too are required to stay out). So there was no choice for me but to release the fish. The water temp at the release point was in the low 40's, and the fish were set free in a relatively shallow still water eddy, below a waterfall that flows over an old mill retention dam. All of the fish released seemed to be healthy (approx. 60), and did not appear to be shocked by release into a different environment (hung around and watched them for a good 15 minutes). I have fished the section of river just below my release site, and some sections above, and know for certain that trout are found in various spots in this stream.

This was a great experience overall, and though it did not end as anticipated, I am already looking forward to next year!!! Please let me know if you have any other questions at all.

### **David Spaulding, Crossett Brook Middle School**

Crossett Brook Middle School still has about 90 fish. custodians are feeding once a day and we are keeping the temps at 45 degrees. I plan to continue to check the water chemistry twice a week. So far so good.

#### Kaitlin Grote, Poultney High School

I made the difficult decision to bring the fish home, we managed to get them to the house in a 10 gallon tank. However temperature control has been difficult and we have lost 90% of our fish. We are holding on to the last few fish we have and they are swimming up and eating. Going to have to take a TIC knee on this one, I feel awful about these little guys as we were doing awesome with their growth and development before COVID-19 closure. Hoping to limp along with our few survivors but there is a lot to learn about their loss as well. Global warming has some drastic impacts on our waterways!

#### Debbie Sanders, Maple Run School

We are down to just 11 fry in our tank, and the custodians are taking care of them. They are the only ones allowed in the school at this point in time. We lost about 80 the week of vacation. I was in Arizona and the custodian who was taking care of them ended up being sick with pneumonia that whole week. Hoping these 11 will survive and we can finish the school year as planned with them.

#### Jaclyn Borelli, Albert Bridge School

Here at ABS we did an early release I documented on camera & I'm sending lessons to my children virtually on our trout. We no longer have access to the building after today & thought that was the safest bet for managing the tank.

### Dawn Adams, Rutland High School

Rutland High School did an early release last Friday. We felt it was the best for the trout. Once they entered the water they started swimming against the current. The water temperature was consistent with the tank.

#### Caitlin Kurnit, Albert D. Lawton Middle School

Our tank is doing well! We've got about 80 fry left after only having lost a couple along the way to random deformities and the like. We've released them out of the breeder basket to swim around the tank and they look so cute hiding in the corners and among the rocks. One was born with no tail and was curled up, and he lived for a surprisingly long time (all the way to and past swim up!). I didn't see him in the tank this week so I'm assuming he died after we released them from the basket. We also had one that looked really large and then had a very swollen belly. I found it floating in the tank on Monday. Any idea what might have caused his belly to swell up like that?

My principal was able to secure me permission to go into the school once a week to care for them. I'm going in every Monday afternoon, doing a big water change, feeding them and testing the water quality. I hope they can sustain on just once weekly feeding. I noticed that a lot of them seem to have figured out that they can eat the food off the bottom of the tank. Depending on how long this quarantine goes on for, I might have to accept defeat and release them into a local creek, but I'm really hoping we can hold on until the kids come back because they've gotten very invested.

### **Danielle Levine, Schoolhouse Learning Center**

My fish are still at school right now. All the teachers have access and we are taking turns to feed them so they get fed every day. They text me when they have done it and record it on a chart. My tank is really awesome this year. The precycling is making it so that I only have to clean the tank every 2-3 weeks so I cleaned it last week so we would be good for a while. Fish look healthy, happy and are growing. I am sending pictures to my students online when I go in.

# Amy Clapp, Salisbury Community School

My tank is empty, and getting cleaned. The fish are in a regular sized fish tank with the cooler and the filter all attached.....the transfer went well, and they appear to be doing fine! Once we get all families up and running, I will be posting pictures to my Google Classroom to show their growth.

### Jenn Tifft, Tinmouth Elementary School

Tinmouth is releasing today. Building restrictions go into effect soon. I had been lowering the temp anticipating this.

# Hanna Galinat, The Riverside School

I brought my trout home where my own kids are loving them. I have slacked off with recording the water chemistry data, though I'm still checking it. They are all swimming around free. When we still were in school, we were having a great time doing some of the lessons on trout anatomy, doing some stream monitoring, playing a life cycle game, drawing fish tessalations, learning about the water cycle, sketching Trout in the Classroom quilt squares, and doing math problems related to the area and perimeter of the quilt. I still plan to mail my students the fabric and their sketches so they can make their quilt square final drafts. If school remains closed for the rest of the year, I'll live stream a release of the trout into our neighbor's pond (flows into a brook that flows through our farm, into the Stevens River and then Connecticut). Then in the fall, I'll invite my old students (along with my new students) out to that pond for a fishing field trip/ tour of our farm as a kick off for a new year of TIC. https://youtu.be/j7MWa4KzNOk

#### Hannah Pelkey, North Hero Elementary School

I brought my trout home and set them up in a smaller tank. I am posting updates on Fridays for my kindergarteners to see them. They are doing well!

### Janis Boulbol, Sharon Elementary School

My custodian is feeding them as of right now but there has been a mandate not to go back into the building so I have to figure that out.

#### Jeff Walker, Benson Village School

My principal released our trout into a local stream a couple of days after school closed. Weds or Thursday, I think.

### Seth Bonnett, Manchester Elementary - Middle School

Our schools were totally shut down and we were strongly discouraged from entering the building at all. I made the decision to release my trout early. My tank is empty and dry.

### Paula Beaudet, Barre City Elementary School

So Michelle Lynch from Barre City bought a smaller tank and brought the chillers home and has our fry there. We haven't lost very many at all and are hoping to keep them alive with hopes we might come back together and release them together (I know lofty dreams) Our children so loved this experience even though it did not go as planned.

# **Eric Cummings, The Academy School**

I am the Academy school teacher who took the trout home. They are currently in my basement. Only lost a couple in all the moving.

### Sabrina McDonough, Shrewsbury Mountain School

I am currently in the process of setting up my tank at home. We were trying to leave it set up at school, with me posting videos to the kids as a way to stsy connected. Unfortunately we got word yesterday afternoon that our buildings will be closed to teachers on a biweekly basis to eliminate any extra precautions the custodial staff have to take each day. Needless to say the last few days have been hectic, and this morning has been about transitioning our turtle as well as the trout. I share/send the videos later once I am finished with set up.

## **Jaclyn Bristol, Guilford Central School**

We had about 90 before all this but lost a chunk to the filter. Currently they are being taken care of by our custodian. If they are no longer allowed in the building then they will come home with me.

#### Michael Manney, Proctor Elementary School

Hey Joe. I just went to school and my principal said as of Monday, we won't be able to get into the school. Anyway, ironically now that the fungus is gone and my fry are doing really well, no more died in two days!. They are active, feeding and growing. Now I have to release them. I just went to Sugar Hollow Brook at the Pittsford Rec Center where we usually release them and the water temperature is only 38. The furnace brook was higher at 40. My tank is at 48. Should I lower the tank a few degrees and hope for the best on release? Thanks.

# **Emily Miller, White River Valley Middle School**

Rebecca and I reluctantly released the almost 150-200 fish from the Bethel Elementary/White River Valley Middle School building into the Third Branch of the White River last Monday, 3/16 (the day our building was closed to teachers). Not ideal, but we decided it was the best shot they had at survival. I did video the release and shared it with some of my MS students.

#### Hope Yeager, South Royalton Elementary School

I moved my fish and fish tank set up to my home on March 16. The move was a little bit of a shock to the fish, and I have lost about 10 fish total since the move. Most of the remaining fish are looking very healthy and are hungry! :-)

### Keith Harrington, Poultney Elementary School

I was down to just 4 fish left. I early released them in the Poultney River the day we were sent home to do online teaching. I watched them for a awhile. They seemed to be enjoying their new life and were adapting well.

#### **Devin Schrock, Lincoln Community School**

We released them into the New Haven last Friday. I believe there were 80ish released from our 110. It just wasn't possible to keep them alive with no custodian or access to the classroom. I took pictures and a video of them swimming in a small pool off to the side in the river.

#### Michael Luzader, Currier Memorial School

No swim up yet. The custodian is checking on the fry throughout the week. However, given the discussion about possible long term dismissal we are in conversation about doing an early release.

### Vasanthi Merette, Shelburne Community School

Fish in breeder basket-getting fed every few days. Will release into tank Monday.

### **Rob Stainton, The Sharon Academy Hill School**

My fish are still at school, but I have access and live less than two minutes away from school, so will be going in every other day.

### Noah Hoffman, My. Abraham Middle School

Hi, Joe! Things have been going very well with my tank at Mt. Abraham in Bristol. About 70% made it to the parr/ fry stage, and I released them from the breeder box two weeks ago, a little earlier than I typically would have, because of the imminent school closure. I befriended our head maintenance guy at school, who is a serious trout fisherman and loves checking on the tank and the development of the fish. He is doing feedings and letting me know about his observations. The nitrogen cycle has seemed to well established this year, so hopefully the tank can handle the higher nutrient load of larger fry and greater feedings without having to do any water changes. I haven't trained anyone in the building to do that besides my students! So, fingers crossed for if and when we return to the building. On another note, I've been feeling very Hemingway-esque with my quarantine beard I've been growing, my daily outdoor adventures, and my "Angler's Pint" I won at our TIC workshop last November! I hope you and your family are staying healthy.

# Jenn Blay, Lowell Graded School

Lowell Graded School had about 88 when had to leave school. Our school has essential workers for food outreach, so one of those ladies is helping to feed and monitor the tank. However, my tank never went through a nitrogen cycle and leaved were rising, so I went in and changed about half of the tank water, the temp was kept about the same and there is more chlorine being added to our water right now so worried about the novaqua not being perfectly matched. Anyway when I left some of them looked stressed hoping tomorrow all will be well. Trying to keep them going, all in whole tank at this point. Might have to consider an early release.

# Michael Lenox, Shoreham Elementary School

As I said I released Shoreham's this week. They took the release very well and where confident in the new setting. I did do the hot and quick. They were ready for the release.