

# MUSH ON!

Monthly Newsletter of the Iditarod Education Department

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## Heading Off the Trail

BY JEN REITER

The 2021 Iditarod is in the books. In a year that featured so much change, trepidation, and flexibility, the one constant was the dogs' ability to move steadily down the trail. Their eagerness and energy to do what they do best is something we can all admire and find joy in. I know that I am not alone in being both grateful and in awe that the Iditarod Trail Committee, mushers, and volunteers were able to pull this year's race off with such flair. I'm anxiously looking forward to finding myself back in Anchorage, in person, for the 50th race next year!

One thing I'm always asked at this time of year is, "Don't your kids have a huge let down when the race is over? They've been so excited to learn about and follow the race, don't they get sad when it's over?" My reply is, just because the race is over doesn't mean the Iditarod learning has to end! There is still so much to share! This month, we focus on ways to bring the Iditarod to your students through the spring!



## April Teaching Ideas

HEIDI SLOAN

Did your class watch the Iditarod this year? There are plenty of follow-up lessons that can continue the enthusiasm!

### Math:

Use the Iditarod Race archived statistics for [this lesson](#).

Learn about sled dog puppy litters and the theme names mushers use, as well as have a measurement activity that goes along with the Iditarod in [this lesson](#).

### Character Education:

[This article](#) illustrates how to avoid bullying and includes sled dogs!

### Science:

For older students, [this project](#) learning about sled dog genetics could be adapted to an extension activity for those who need a challenge and love sled dogs. (While a few of the links maybe expired, they don't take away from the lesson!)

### Language Arts/Writing:

Use [Iditarod photos](#) to encourage writing organization!

Let your students read and write with [this lesson](#) on Alaskan animals! It can also be connected to science standards about habitats, animal traits, and food chains.

## Use Your Senses

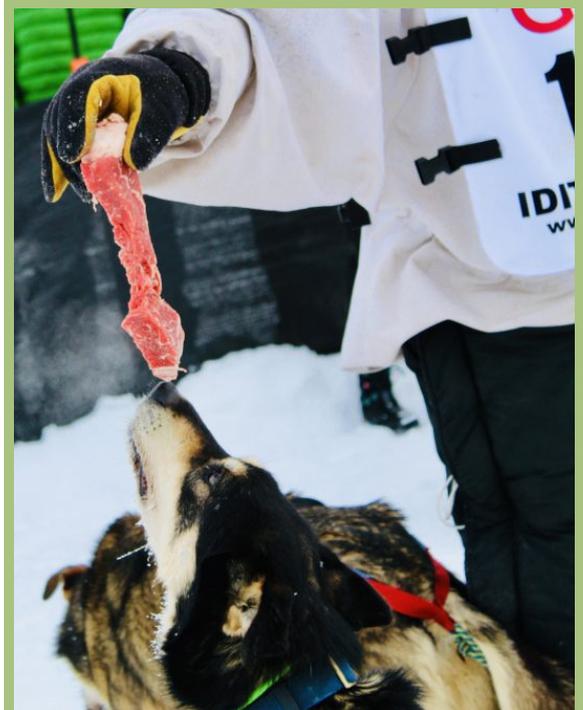
This picture was taken at this year's finish line by a member of the Iditarod Team. Have your students use their five senses to describe the scene from the point of view of this Nicolas Petit dog. What is the dog seeing, hearing, feeling, smelling, and tasting? What is going through his head at this moment? Click the photo for a larger version of the image.

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"The only way to finish the race you're in is to simply not quit. So after finishing 30,000 miles of sled dog races, that's my parting advice: Keep moving forward."

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~Aliy Zirkle



# Updates from the EDU Trail

Checking in with our EDU Team to see what you can expect this month:

## A Sneak Peek at the Upcoming Teacher on the Trail Posts

Jim Deprez,  
2021/2022 Iditarod Teacher on the Trail

What a race! From Dallas Seavey winning the elusive 5th title, to Victoria Hardwick earning her 2nd Red Lantern, and everything in between. From buffalo and moose encounters to sick dogs and weather, the mushers faced a whole gamut of challenges that Iditarod 49 had to offer, not to mention “the Burn”, Dalzell Gorge, and “The Steps” twice.

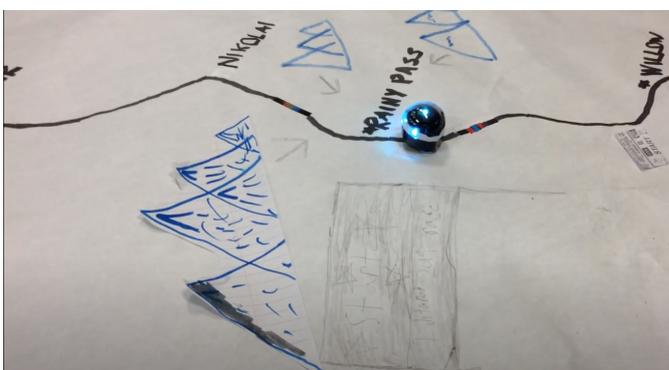
Now that we can look back on it, this year certainly was one for the books, or, in this year’s case, one for the computers! As all Covid measures were taken, many fans had to enjoy the race this year from their homes, and relied heavily on the amazing coverage provided by the Iditarod Insider. It was a memorable year for sure, and I know many of us are already watching the countdown until 2022, the 50th anniversary of the Last Great Race.

## Moments With Mushers: Funniest Moments

What would be better than hearing about some of the mushers’ funniest moments from their time behind a sled? Hearing about it during the month of April Fools! Pam Flowers, Jeff Deeter, and Dick Mackey all contributed to this month’s post. Jeff Deeter’s story was particularly hilarious. Be sure to check back on the 15th to read these funny moments from the trail.



John Baker and Aaron Burmeister Share a Laugh  
Photo: Terrie Hanke



## Classroom Connections: Coding the Iditarod

This is one of my favorite lessons that I do with my students during the Iditarod season. Ozobots are small code reading robots that do certain motions/actions depending on the colors they travel over. Each year we make copies of the race course on huge butcher paper so the kids can be part of this group project, but all spread out and work on a different section

simultaneously. They research the checkpoints and terrain between the checkpoints using the Iditarod website, and plan the actions accordingly. Finally, working together, they compose a script and film their final product using iMovie. It’s so interesting to see what these groups come out with in the end! This lesson will be available at the end of the month.

# Changes on the Iditarod

by: Gypsy

Dear Friends,

We just completed the 49th Iditarod Race! It began in 1973, planned out by Joe Redington who wanted to preserve the historic Iditarod Trail and revive the Alaskan sled dog tradition, which was rapidly disappearing..



Barbara Redington holds a doll replicating her father-in-law, Joe Redington, who started the Iditarod.  
Photo: Heidi Sloan

What was the Iditarod like back then?

When the mushers lined up to take off on their adventure, they didn't really know what to expect. Some of the wives were crying, thinking they may never see their mushers again. The gear wasn't as warm. They didn't have bottles of Heet to start a fire to melt snow. A few of their wives packed the mushers canned food like green beans and such to take along. How do you think that worked in the cold?

The sleds were much heavier and the dogs were bigger. They couldn't go as quickly. Some mushers tell of staying in the homes of the people in the checkpoint stops, enjoying warm meals cooked by others. If they stopped along the trail to camp, they cut down branches to build a fire to warm their food. Every chore took much longer. They didn't have all the volunteers like today.

On Iditarod.com, you can find some very interesting numbers which show changes in the race. Click on Race Center, and then the Race Archives link. In what years did Rick Swensen, the record holder of five Iditarod championships, win? Dallas Seavey just tied that record with this year's first place finish! What other years did Dallas come in first place?

The finish time has changed drastically! Dick Wilmarth won the 1973 Iditarod in 20 days, 49 minutes! The fastest time for the typical trail is about 8 days, 11 hours.

What happened? Why is there so much change? Here are some ideas:

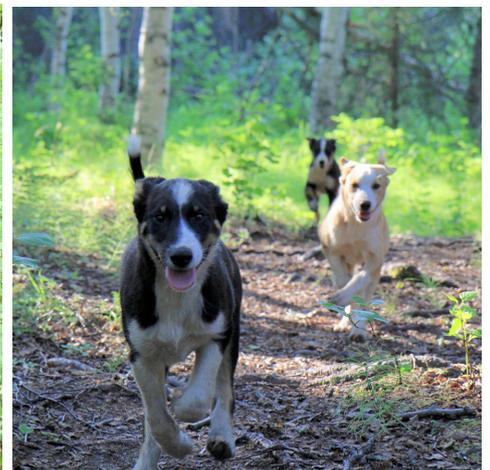
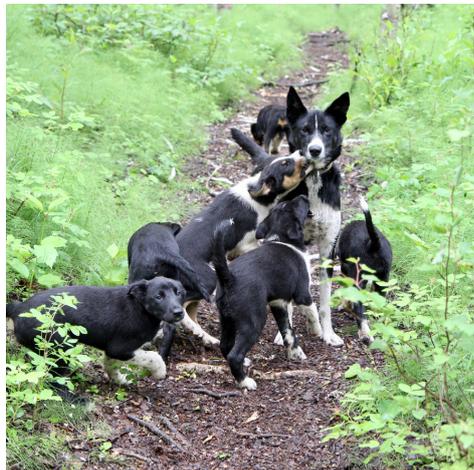
- New synthetic fabrics for warmer gear
- Dogs have been bred who are faster and built more for long distance runs
- Sleds are lighter
- Better dry dog food is available
- Volunteers do a lot to get ready for the mushers
- Trail breakers try to keep the trail packed down when possible
- Strategies have been developed to shave off minutes

If you want to learn more about how the race has changed, you can also read [this article](#) by 2021 Teacher on the Trail™, Jim Deprez.

It's almost been 50 years of mushing across 1,049 miles of wilderness Alaska. I'm glad you came along for the ride!  
Until next time, Gypsy



Spring is for Puppies and Free Runs!  
Learn More on Page 6.  
Photos by: Terrie Hanke



# Teaching with the Insider: Race Edition

by: Jane Holmes

The mushers are off the trail once again, demonstrating incredible skill, courage, and perseverance. What does it take to be a musher? You might hear folks talk about dogs, sleds, equipment, etc. but it's what is inside that mushers need to draw on to run the Iditarod. They need: Innovation, Determination, Integrity, Teamwork, Attitude, Respect, Optimism, and Diligence. They need the 8 Traits of Iditarod. Following are this year's race videos that are examples of all of the qualities Sanka W. Dog wrote about in the 8 Traits of Iditarod in [these articles](#).

**Innovation:** [Victoria Hardwick Battling Through](#) March 11, 2021

Victoria had to fix a broken sled with only what she had with her on the trail.

**Determination:** [Mille on the Changing Trail](#) March 12, 2021

Mille describes now one thing after another kept coming at her, and she just kept on going and going.

**Integrity:** [Mark Nordman Race Update](#) March 10, 2021

There are lots of moving parts behind the race, decisions and actions to keep the race safe. Deciding what's best for the dogs and mushers and upholding all of the rules and regulations - take integrity!

**Teamwork:** [Royer Finishes Iditarod 49](#) March 15, 2021

Incredible story of teamwork with Jessie Royer and Jeff Deeter when they encounter a moose that didn't want to share the trail.

**Attitude:** [Tuminelli Leaving McGrath](#) March 11, 2021

Susannah Tuminelli explains how important it is to have your "head on straight" and be mentally upbeat.

**Respect:** [Redington Thanks Young Sponsors](#) March 12, 2021

Ryan Redington takes the time to show respect to the students who have also taken the time to do things for him.

**Optimism:** [Will Troshynski in McGrath](#) March 12, 2021

This is an in-person interview with Will and from the very beginning he exudes optimism and even talks about how being far back in the race isn't bringing him down at all.

**Diligence:** [Seavey Wins 5th Iditarod](#) March 15, 2021

Dallas is the epitome of diligence - persistence in hard work and effort - to get through life and become an icon in Iditarod history.



Dallas Seavey Wins his Fifth Iditarod  
Photo: Iditarod Team



Ryan Redington in Nikolai  
Photo: David Poyzen

# If You "Mush" Know...

by: Lynne Witte

This month's question comes from.....

**Jack**

**What do the dogs do when a big race like Iditarod is over?  
What do they do when they get home?**

## Run Snack Love

What's next? The Iditarod teams have completed 832 miles of running on the Gold Trail Loop as a team and have navigated tough trail sections and overcome many challenges together. It is time to run free, snack, and love. The musher and their team have formed an incredible bond, because they have worked together for so many miles training and racing. Both mushers and dogs have given each other their best efforts.

Once the team is at their kennel home to relax, spring break begins. Dogs will get the opportunity for sofa time to be sofa super heroes or relax in their kennel houses that have been filled with fresh straw. The dogs will continue to get lots of nutrition from frozen meat snacks and warm meals.

After a good day's rest, it is time for some massaging, stretching, and free running. Mushers are able to massage and stretch their dogs just like our human athletes are massaged and do stretches to limber up and help prevent injuries. It is time for free running in a fenced area or open space to give the dogs the opportunity to get out the wiggles, stretch, and limber up. The musher can watch the dogs for good movement and see if they are limber. They will give special attention to any ailments or stiffness.

This is a time for mushers to reflect while dogs can run free, snack, and love.



Special Thanks to Kayln Holl and Ryne Olson for sharing these photos of spring time at Ryno Kennel.  
Ryne finished 18th in this year's Iditarod.  
Photos by Kaylin Holl.

# Husky Talk Update

by: Erin Montgomery

## Episodes released in late March: Brent Sass and Matthew Failor Upcoming Episodes: Iditarod Award winners

In late March, after the Iditarod, we released two episodes that were recorded before the Iditarod. The first episode was with Brent Sass. In our interview with Brent, he was on his way to Wasilla to take a COVID test prior to the race and do final race day preparations. We talk with him about a recent accident he had that required surgery and how this affected his training leading up to the race. In our second episode we talked with Matthew Failor. Matthew lives mere miles from the start and finish of this year's Iditarod. We talk with him about his thoughts on this year's route and if he feels his dogs have an advantage since they will essentially be racing home.

We are looking forward to interviewing some of the top place winners of the Iditarod this month, including champion, Dallas Seavey, rookie of the year, Chad Stoddard, and first female, Mille Porsild. Our goal is to put together an awards show with clips from winners of the many awards given out this year. Some of those awards include the Humanitarian Award, the Sportsmanship Award, the Most Inspirational Musher, and more. Please continue to tune into Husky Talk the rest of this school year as we will still have more episodes available for you and your class.

If your class wants to be featured on Husky Talk, follow our Iditarod EDU Facebook page to see who future podcasts will be with. Your students can email us at [huskytalk1@gmail.com](mailto:huskytalk1@gmail.com) and ask a question they would like us to ask our guest. We will ask their question and say their name. You can also email us if you would like to hear a certain guest on our show.



Brent Sass and Matthew Failor  
Photos: Jeff Schultz



Brent Sass at the Starting Line of the 2021 Iditarod  
Photo: Iditarod Team

# Primary Source of the Month

Jen Reiter

Something that every Iditarod Rookie looks forward to is "earning his or her buckle." Each Iditarod finisher is awarded a brass finisher's belt buckle upon the completion of their first race signaling that they are a rookie no more! In the early days of the race, the Nome Kennel club wanted to do something to honor the achievement of the Iditarod mushers. Richard Burmeister suggested, and consequently designed, the buckle in 1975 and adorned it with an image of his own dog team. Later, finishers from the first two races were also given their buckles. Despite having created the buckle, he couldn't have one of his own until he too finished the race! Richard went on to run the Iditarod in 1979 and 1982 finishing in 41st place both times.

This year, his son, and second place finisher Aaron, decided to honor his fellow mushers with a special version of the buckle to commemorate the unique challenges of the 2021 Iditarod race.



Special thanks to Ryan and Barbara Redington for sharing this image of Ryan's buckle. Ryan finished 7th in this year's race. Click the photo for a larger image.

## Using the Source With Students

1. Display the photo for the students and have them share what they See, Think, and Wonder about the artifact.
2. Share with them the story behind the buckle.
3. The buckle symbolizes a major accomplishment for the musher. As we are nearing the end of the school year, have the student design a belt buckle to symbolize all of their accomplishments in school this year!

4. In addition to the buckle, each musher receives an official patch when they complete their first race. The Iditarod Trail Invitational, a biking, skiing, and foot race along the Iditarod Trail, last year announced a new patching system to recognize various levels of repeated accomplishment within their race. What if the Iditarod were to do something similar? What accomplishments should be recognized? Have the students work in teams to analyze the [ITI patches](#) and create a plan for a new patching system for the Iditarod Sled Dog Race inspired the ITI plan.

### Associated Resources:

- Teachers on the Trail Heidi Sloan and Laura Wright collaborated on this [art lesson](#) that teaches the students the art of embossing as they learn about the history of buckle. (While a few of the links maybe expired, they don't take away from the lesson!)
- [Iditarod, The First Ten Years](#) has an article by Richard Burmeister called "The Finishers' Buckle: The Burmeister Legacy" that would be wonderful to share with students.
- Zuma's [Zoom Lens Photo](#) of the buckle from a traditional race year.

# Eye on the Trail: Sled Dogs - The Ultimate Athletes

Story and Photo By: Terrie Hanke

A standard marathon is 26.2 miles in length. Iditarod's Gold Trail Loop of 2021 was 832 miles long. That is pretty close to the length of 32 marathons. If you've ever met a marathoner at the finish, the runner is spent. Even if you give your runner something to drink, a chunk of banana and an orange slice then let them have a couple of minutes to eat before you ask this all-important question "Are you ready for 31 more?" The answer would be a resounding, **NO!** Ask the same question of a sled dog, the dog would be ready to go, **NOW!**

How do they do it? These canines are the ultimate athletes; many say they are the greatest athletes on earth. How do they perform at such a high level day after day, mile after mile? They get to Nome and stand under the burlled arch wagging tails, lunging and barking to go further. They have to stop because there's no more trail.

Sled dogs have something called a metabolic switch. Does it operate like a toggle switch or does it operate like a dimmer switch and what happens when the switch activates? Chief Iditarod Veterinarian Stuart Nelson, DVM has explained the phenomenon to audiences of race fans many times. Mike Davis, DVM and Professor of Physiology at Oklahoma State University has studied the metabolic transformation that occurs when sled dogs participate in long distance racing for nearly two decades.

When those jazzed dogs took off from Deshka Landing they were getting their energy from glycogen. The same would be true of a human running a marathon. Glycogen is formed from glucose that comes from the foods we eat and then is stored in the muscles. When glycogen supplies in the muscles drop to a low level, the human athlete becomes fatigued and needs to rest and eat to replenish the glycogen. The canine responds differently.

The metabolic switch flips and the source of energy for sled dogs changes. Sled dogs go to a glycogen-sparing metabolism. They no longer deplete the glycogen in muscles. Davis says they begin pulling fat from the bloodstream into their cells and use it for energy. When racing, nearly 60% of a sled dog's diet is fat based so fat is readily available as fuel. The remaining 40% consists of carbohydrates and protein.

Typical feeding patterns for long distance racers are based upon sled dog science. Mushers snack dogs every two hours. Look at the GPS tracker and you can see speeds drop to zero in two hours intervals while dogs get a high fat snack. Teams generally run 6 hours then rest six hours. During longer rests, athletes enjoy gourmet high fat meals complimented with appropriate quantities of carbs and protein, nutrients and minerals. Sled dogs consume 12,000 calories per day during a race. That's huge compared to an average human who consumes 2,000 calories a day.

As has been said many times, it's not the size of the dog that counts but what's inside the dog that counts. The way sled dogs change food to energy through their metabolic processes and how those processes transform in long distance racing is on the inside and that is what makes sled dogs the greatest athletes in the world.



# EDU Mail Projects Update

By: Jen Reiter

The Iditarod Education program launched two very successful mail based programs this year, to honor the use of the Historic Iditarod Trail as a mail trail: the Iditarod Postcard Challenge and the Educational Trail Mail Art Contest and Trail Mail projects.

Sixty classes and homeschool students representing 42 states and Canada, exchanged postcards to teach each other about their states. The cards shared information about the state sport and dog as well as other interesting facts. Did you know that Alaska's state dog, the Alaskan malamute, was chosen by a group of school kids? And, no fan of Iditarod will be surprised to learn that mushing is the state sport!

If you'd like to get in on this project for next year, be sure to keep an eye on the September Newsletter and the Iditarod EDU Facebook page next fall for your chance to secure your spot!



Dawn Serigne's Arkansas Classroom



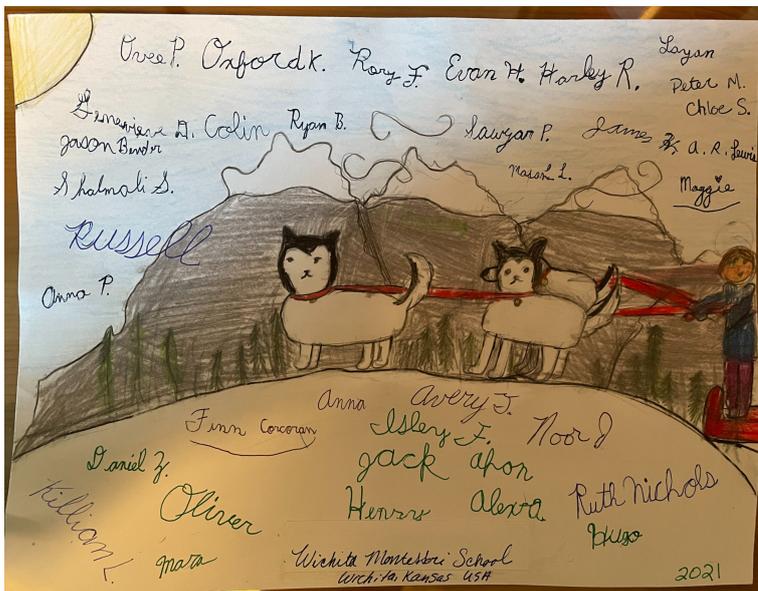
Above: My class in Maryland  
Right: Cheri Relph's California Class' Collection



Following our Inaugural Trail Mail Art Contest, which you can read about [here](#), we were thrilled to send 288 letters down the trail for classes from 38 different states, Canada, and Great Britain. Teachers from preschool to college used the Trail Mail as away to have a piece of their classes travel the trail in a mushers' sled. Each class found out ahead of time which musher had their mail so that they could track their team throughout the race. Projects that were carried by the mushers ranged from student artwork, to poetry and stories, to collections of signatures, to Bitmoji class pictures. We are especially grateful to Ryan Redington who agreed to carry an extra cachet of mail when Seam Williams wasn't able to start the race at the last minute.



We will announce plans for next year's Trail Mail Art Contest and Educational Trail Mail early next fall. Keep your eye on the newsletter, EDU website and Facebook Page for details!





Free Run Time at Ryno Kennel  
Photo: Kaylin Holl

# Mark Your Calendar

April 8, 2021, 5pm AKT: Virtual Awards Show  
June 26, 2021: First Day to Sign Up for the 2022 Iditarod

**Iditarod**<sup>®</sup> **EDU**

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