

## CSR STEM Ranch CRA presentation, Fall 2024

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**STEM Ranch** is the formal camp designation, and includes the following program areas - **Equestrian, Griffin Garage, Building Barn, STEM Center and Sustainability Space**. Future program/activity area additions include – Heller’s Hammer Forge for blacksmithing.

Our first program began in 1986 (verify this). I was helping Ranger George Patrick during pre-staff build the stalls below the barn originally used for housing the horses at Camp Read. The **Equestrian Program Area** – offers Horsemanship Merit Badge, and Trails Rides. Future merit badges could include Animal Science, and Veterinary Medicine \*Check these mb titles

During 2016 I was recruited by Ranger Kris O’Connor and became Director of the **Griffin Garage** program where Welding, Electricity and Home Repairs merit badges were offered. Prior to 2016, welding was instructed by Ranger Tom Barnes in his shop, and I recall helping instruct electricity merit badge at least a year before then. Today, Griffin Garage is used for both Welding and Metalwork merit badges to 26 scouts daily, and can accommodate 36 with a full day schedule. Future merit badge offerings in the garage could include Automotive Maintenance, Composite Materials, Farm Mechanics, Railroading, Traffic Safety, and Truck Transportation.

Note - For a couple of years offered advanced welding for older scouts until Metalwork merit badge was added to the schedule.

From 2017 – 2019 the program was identified as **Imakanation, pronounced “I Make A Nation”**. Then and now, it offers introductory experiences in a variety of areas for scouts to learn - hands-on **skills** they may use as homeowners, information they will need as consumers, and may lead some scouts into merit badge specific occupations. Many of our merit badges require some research about specific careers, and the skills used here may lead them into trades and other STEM careers.

\*Note - Heller’s Hammer Forge for future blacksmithing programs. The space on the north side of Griffin Garage is the proposed building site, for 4 blacksmithing stations used by 8 scouts at a time.

*\*Historical Note – Griffin and Heller were former families/owners of the New Farmhouse Property*

Summer 2017, we opened the wall into the **Building Barn Program Area (2017)** – Home Repairs and Metalwork merit badges were moved into the barn, and for one year each, Woodworking and Architecture merit badges were offered. Additional merit badges in the area could include Inventing, Model Design and Building, Painting, Surveying, Textile, Woodworking

The **STEM Program Area** started in 2019 in the new farmhouse dining room. There Electronics and Robotics merit badges were provided. 2022 the STEM program was moved to the side of the horse barn adjacent to the horsemanship instructional space. For 2023, Electronics and Robotics began an alternate year rotation in the program schedule, and Space Exploration was added. Other merit badges that could be offered include Digital Technology, Drafting, Engineering, Fingerprinting, Game Design, Graphic Arts, and Programming merit badges.

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This past summer, the once chicken coop became the **Sustainability Space** for Energy and Space Exploration merit badge. It also served as the instructional area for Robotics merit badge, since the STEM Center was repurposed for storage and servicing of camp equipment. In the future Aerospace/Aviation, Nuclear Science, and Sustainability merit badges could be offered.

Other topics and activities beyond merit badges that could be added at STEM Ranch, include – Drone Flying, 3D Printing, RC car racing, paddle making, roping (lasso skills),

The possibility also exists to offer merit badge specific weekend workshops during the fall and spring. There has also been an outline drafted for a full week space camp with additional spaced themed activities throughout camp. It can be adapted to an aerospace camp where Aviation merit badge could be offered in addition to Space Exploration, and other related activities could be added. With a serious commitment and effort, such a program could compete with the widely known Space Camp in Huntsville, Alabama. With the facilities and resources at CSR, we can offer things that provide additional and unique experiences.

### Some other notes about STEM Ranch

The STEM designation refers to Science, Technology, Engineering and Math. This "acronym was introduced in 2001 by scientific administrators at the U.S. National Science Foundation (NSF)". Twenty years later, 2021 was the first operational year of STEM Ranch, as the fourth camp on the Curtis S. Read Scout Reservation. It was named STEM Ranch by the former Westchester Putnam council board in the fall of 2019.

Note – contact me, Greg Pitonza [trvIntx@frontiernet.net](mailto:trvIntx@frontiernet.net) if you would like an extended history of STEM, Technology Education, and Vocational Education, along with specifics about the critical need for sciences, technological literacy, skilled workforce and related impacts for our economic and national security.

The New Farmhouse property, now home of STEM Ranch, was added to Curtis S. Read Scout Reservation in 1984 and was connected with the construction of Rose Drive. \*Do you know why it is called Rose Drive, and how did Ranger Bob Newton become "Rose"? The farmhouse now provides meeting space, plus kitchen and bathroom facilities for the staff to use on the first floor.

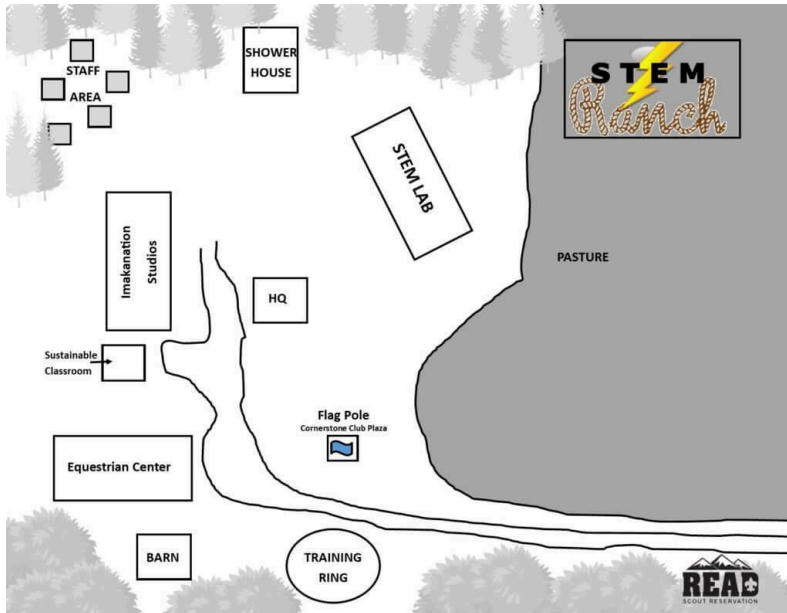
The Equestrian program, that was at Camp Siwanoy prior to 1986, now includes the full pasture, fenced in space with shelter behind the barn, riding ring, and several riding trails through the woods behind Camp Waubeeka and Buckskin

Imakanation, is derived from I Make A Nation, to offer merit badges and programs fostering **imagination and innovation**, acquire self-sufficiency skills and ability to **make** and repair things themselves (**I**), become better consumers of services, introduce scouts to possible careers that are critical to sustain and become citizens to maintain both U.S. economic and national security for our **nation**.

During 2021, five new enclosed lean-to structures were donated to establish a staff area in the space above the New Farmhouse buildings. This was the former sand/rock pit used when Rose Drive was made. Do you know why some of us spent hours there a couple years later picking rocks, and why they were used to level platforms for a campsite in the field near the white gate (between the original camp property and what is now STEM Ranch)?

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A campaign continues with the goal of acquiring funding for new facilities at STEM Ranch. This could provide additional garage space usable during the summer for merit badge activities, along with needed bathroom and shower facilities for staff. The map below and other details can be found at <https://www.ghvbsa.org/stemranch/>



While fundraising has been underway for STEM Ranch improvements, we have been fortunate to be able to - adapt and reconfigure the facilities available, acquire a variety of donations for program specific improvements, get the help of numerous volunteers to run and improve our program areas, have a wide network of advocates and supporters, and share the enthusiasm of scouts and others. Support by the council, along with financial, volunteer, and other donations, are all valuable parts of making STEM Ranch possible.

STEM Ranch provides unique experiences that can draw older scouts specifically to Camp Read. The age requirement for merit badges follows a sequence and rotation of merit badges and activities. A first-year scout can take Horsemanship and Space Exploration, then each year do other merit badges at age-appropriate levels. Recognizing and valuing the need for scouts to participate in the traditional outdoor camp program, the age-based progression keeps the youngest scouts in camp at least half of the day. As they become eligible to do additional merit badges as STEM, each year they are given more reasons to return to camp through at least the age of 15 when blacksmithing is offered. Merit badges with increased demands for maturity and safety, like welding, are added later in the progression. It is also a preference to offer merit badges that may not be available at home for our scouts. The ongoing patterns of enrollment clearly reflect this need.

The unique combination of a horse program with STEM opportunities has many connections. Shoeing horses has direct ties to metalwork and blacksmithing. Horsepower is used in both areas, and extends into other power sources like STEAM and varied energy sources.

STEM Ranch incorporates a wider variety of technology, that are often beyond what is now perceived as STEM education. We know that purely academic learning needs hands-on experience to become relevant, and needs to be applied in a wide range of professions to be useful and productive. While too many schools have

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abandoned the skills taught in true Technology Education labs, STEM Ranch gives them opportunities they are less likely to get in their formal education.

There are fees for some of the material/expense intensive merit badges like, welding, plumbing, and horsemanship.

Some merit badges have pre-requisite requirements that can only be done or prepared for at home.

STEM Ranch has an ongoing wish list of things that will improve and enhance the program. While our current focus is on the Sustainability Space and Blacksmithing Shop, other areas have items that may someday allow us to give scouts more in depth and extended experience.

### Highlights 2024

- 278 Merit badge completions
- Thank you members of the Camp Read Association who for the \$3000.00 used for the purchase of 4 quality metal vises, 4 sets of blacksmithing tools, 4 cast steel anvils and a 60-gallon compressor. The anvils and blacksmithing tools are used for a couple of Metalworking MB requirements, and sets us up for future blacksmithing program for scouts age 14 who have completed Metalwork MB. Vises have made preparation of welding materials safer, and the compressor will have many uses in Griffin Garage and the Building Barn once set in place and lines are plumbed for easy access. Bonus - Extra cement from the new floor in the Sustainability Space was used to pour a 3' x 3' pad for the compressor under the large overhang on the north side of Griffin Garage.
- Another significant donation, by Charlie Strohman has been made for the program. We are in the processing of researching and pricing program items that best fit the direction of the program.
- We are presently seeking donor/donors to purchase materials to build the framework and metal roofing for a blacksmithing space. Boards from the Sustainability Spacer loft have been power washed and stored for future use to in the construction of the blacksmithing space.
- Others have brought us steel, plumbing tools, and various items to help us make improvements. These ongoing relationships with friends/leaders/adults/others have benefitted us in numerous ways. They see the continuity and ongoing development of the program, along with all the little things that show we are committed to scouts, the program, and best interest of camp. Returning favors, caring for what we have, being frugal and resourceful, organizing the areas, cleaning and picking up along the way, volunteering extra time beyond programs hours, "Thank you's", working with volunteers when they help, the enforcement of safety standards and rules, conversations when invited to campsites and table in the dining hall, in person follow up, etc. have given us positive attention, support, and more
- Adults in camp spent many hours helping us instruct merit badges and help our staff with skills they were not experienced enough to teach and/or able to safely lead activities for several merit badge requirements (where higher levels of skill and experience is critical to help scouts do activity requirements).
- During pre-staff, we prepped and helped pour the concrete floor in the new Sustainability Space building, remove the unsafe floor of the former hay loft, power wash the inside walls and ceiling structure. With volunteers during the summer, we made windows using sliding glass doors from the former display cabinets of the Waubeeka Trading Post, and will be finished with hinges and

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flashing with leaders from one of the troops when they come to camp in November. Note – in return I am helping their scouts make canoe paddles.

### Critical needs for 2025 –

- Adult staff with program specific experience is essential for the safe and effective implementation of the program.
- Our goal from 2016 has been to offer a safe and successful program.
- Ongoing communication - It is worth offering a quote by Apollo XIII Flight Director Gene Kranz, “In any organization, teamwork is a force amplifier”. This is part of the attitude that led to the safe return of a crew many believed would be lost in space. I would add, “communication is the foundation of effective teamwork”.
- Input to brainstorm ways for camp and the reservation to grow/improve/innovate/etc.

**Extra Bonus Credit Historical note and question** – The following reference from, **BEARS, BIBLE AND A BOY**, Memories of the Adirondacks, By Jesse David Roberts, includes reference to Albert Griffin who once owned the New Farmhouse property.

Having learned at a trading post that a lumber company at the head of Brant Lake was cutting off the primeval pine, spruce, and hemlock trees and selling quarter sections of the rough land for \$300.00, Father eagerly pushed on ten miles farther, where he bought the second farm beyond the head of the lake. This quiet valley, bordered on three sides by seven mountains in horseshoe shape, and opening at beautiful Brant Lake, was the land of his dreams. His one hundred and sixty acres of woodland contained scores of old and young sugar maples, a trout stream, a waterfall, and a never-failing spring of pure water. Here he could build his cabin and enjoy the peace and riches of the wilderness.

At the end of the Civil War, more people began to move into the Brant Lake region, making it a neighborhood of ten hardy families. Four families actually lived just outside the valley, but were considered part of the neighborhood. The honest-sounding names in themselves reflected the pioneer spirit of America: Bolton (Thomas, Joe and Valentine), Arthur Smith, Steward Purvee, Albert Griffin, Thomas Bentley, Eleazor Davis, and Ross (Austin and Cassius).

As each family owned a quarter-section of land, the houses were situated approximately one-half mile apart. A tiny schoolhouse, conveniently located to care for the educational needs of the children, was built on a connecting crossroad near the lake. The nearest store was seven miles south at the outlet of the lake, while the area back of the surrounding mountains consisted of some fifty thousand acres of wilderness.

Do you know what the Griffin campsite was used for?

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### A few things to think about this weekend?

Never forget your first time at camp and the things and people that bring you back

We have two choices. To demolish or build? (Applies to things and people)

What was your life changing experience at camp?

If camp was closed, where would you go?

In one sentence, what does camp mean to you?

In one word, what does camp mean to you?

Would you do it over again the same way? Excluding when you get stuck off the road.

Why are you glad the trees in camp can't speak?

Ever miss the turn?

If you made a new postcard for camp, what would it show or say?

Would you give your right arm to be ambidextrous?

Would you cut a tree to save a forever wild forest?

If camp is a shortcut, where does it take you?

What is your favorite camp vehicle?

How would you help someone who has never been at camp "get it"?

Somewhere over the camp road way up high and the \_\_\_\_\_

Who's on the hypothetical camp staff dream team?

Will you ever be the same again? Why?

The most ridiculous thing I ever saw at camp was \_\_\_\_\_

How many miles have you walked in camp so far?

What did you miss the most about camp on your first day home?

What voice would make a great camp commercial?

Ride the van or go by car?