

TOOLIK FIELD STATION

2020 SEASON OVERVIEW

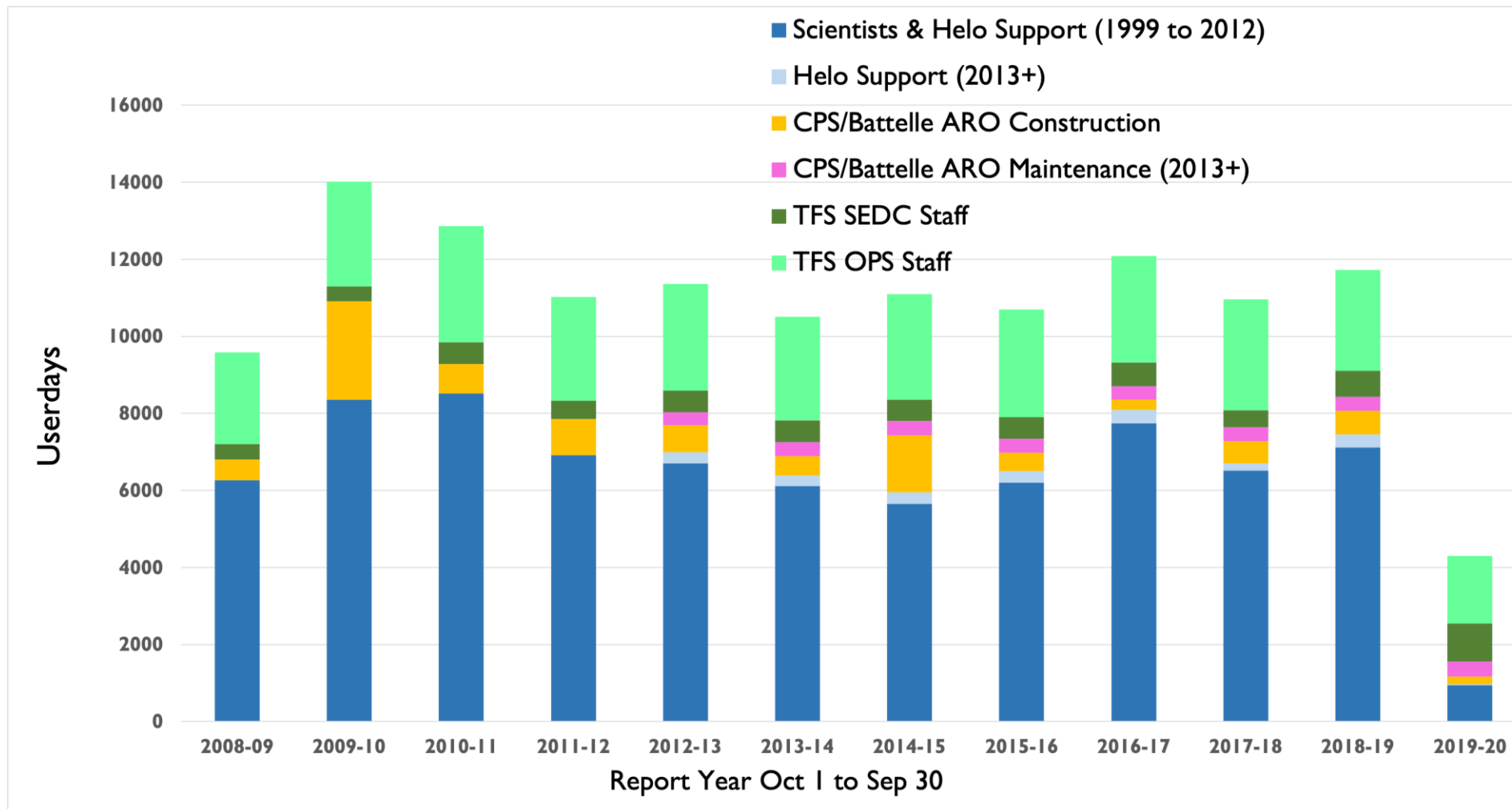
OCTOBER 1, 2019 - SEPTEMBER 30, 2020 REPORT



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USERDAYS TOTALS



USERDAY CATEGORIES

PERCENT CHANGE 2018-19 VS. 2019-20

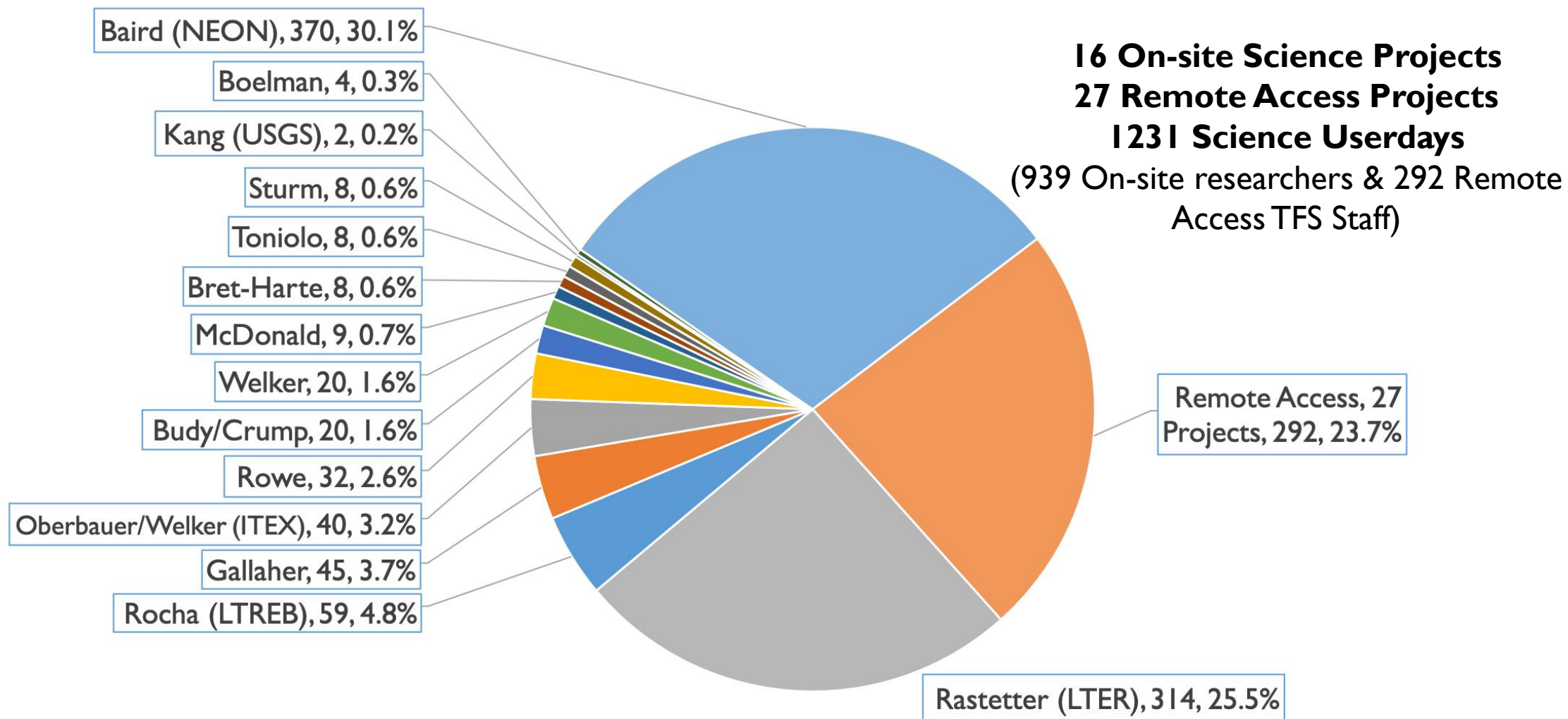
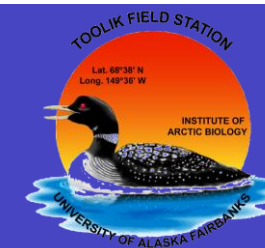


	2018-19	2019-20	CHANGE	PERCENT
TFS OPS Staff	2609	1743	-866	-33%
TFS SEDC Staff	676	998	322	48%
CPS/Battelle ARO Maintenance	365	376	11	3%
CPS/Battelle ARO Construction	609	201	-408	-67%
NSF Helicopter	939	36	-903	-96%
Scientists	7115	939	-6176	-87%
TOTAL	12313	4293	-8020	-65%

NOTES

- TFS operations staff
Reduced staff because of COVID19 restrictions.
- SEDC
Additional staff hired to support Remote Access requests
292 days, days also presented in science projects chart.
- NSF Contractors
Only 1 construction deployment in the fall. Spring canceled.
- Helo
Only 1 helicopter with reduced time on-site starting mid-July.

SCIENCE PROJECTS



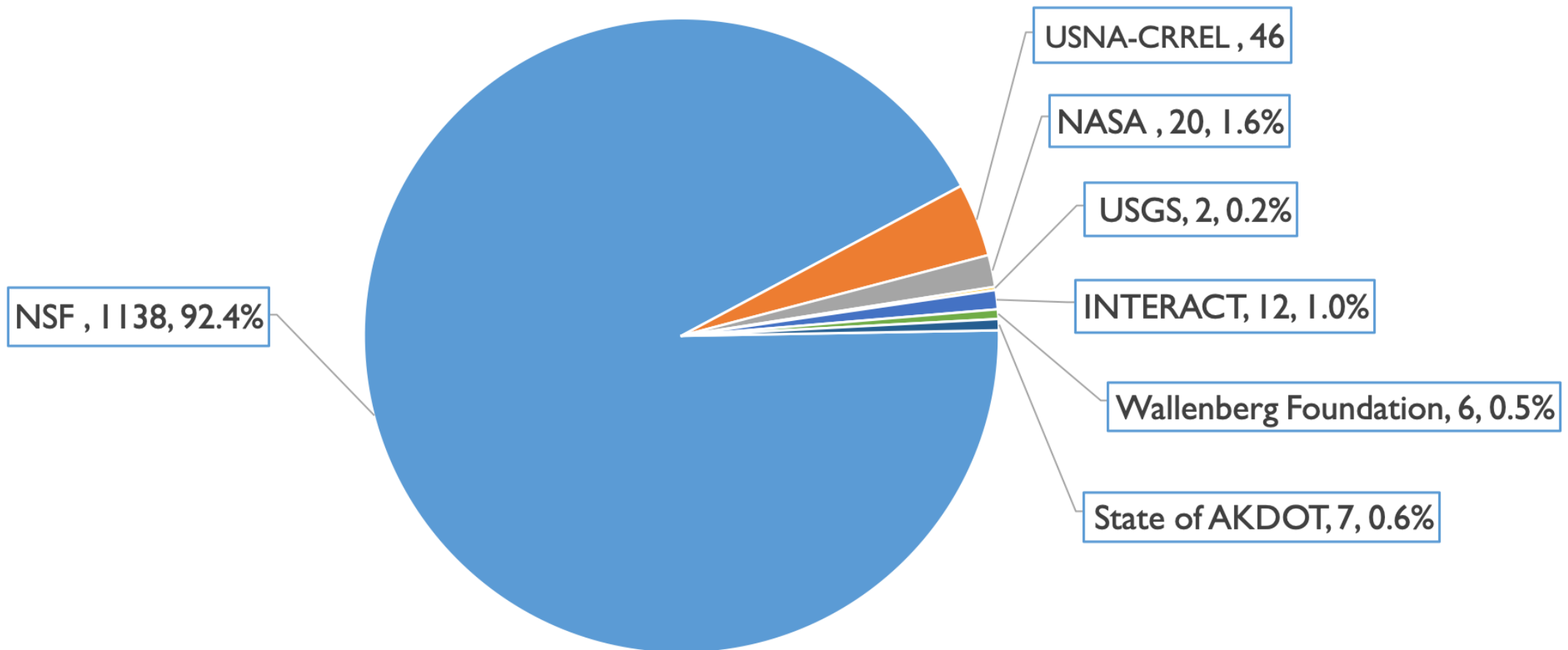
REMOTE ACCESS PROJECTS USERDAY EQUIVALENT *



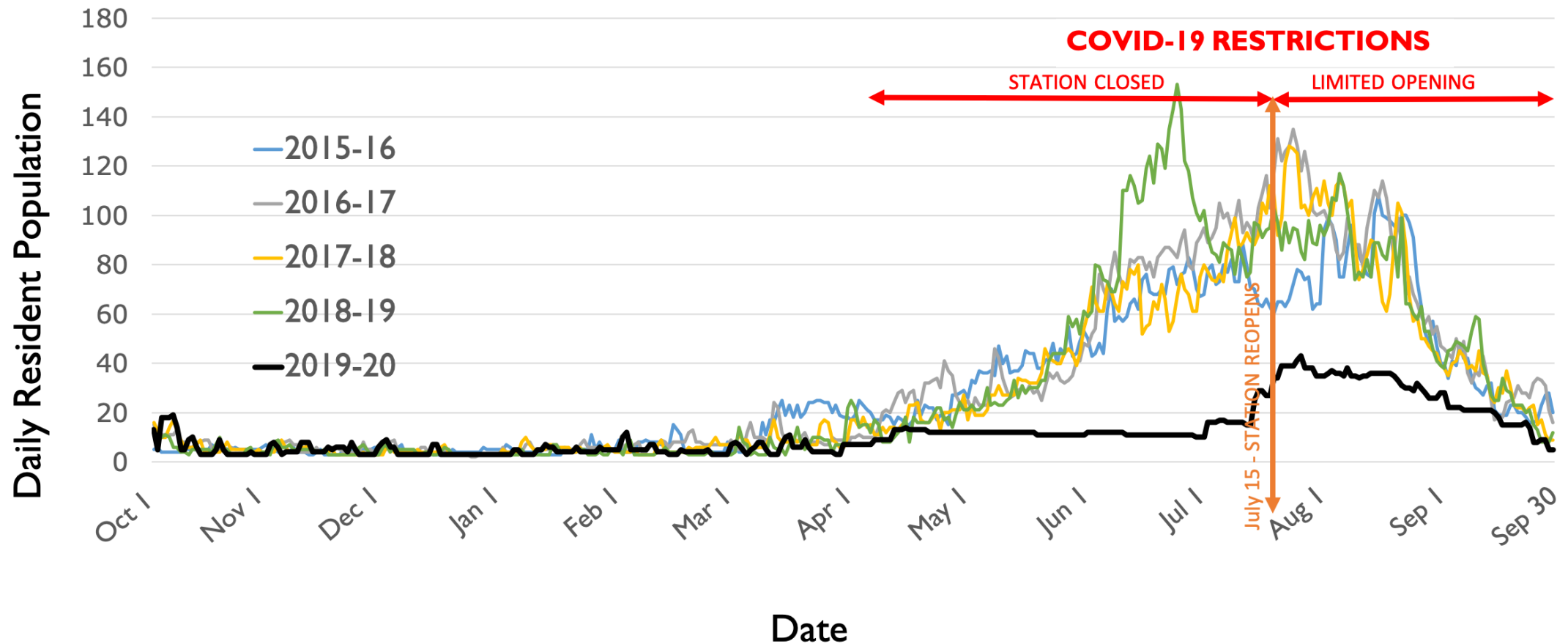
REMOTE ACCESS BREAKDOWN		USERDAY EQUIVALENT
Rastetter	Arctic LTER	100
Baird	NEON	50
Oberbauer/Welker	AON-ITEX	32
Herndon, Kinsman-Costello, Weintraub	Phlr (Phosphorus-Iron) in the Arctic	21
Boelman	Team Vole	13
Shelef	Interactions between erosion and permafrost thaw	11
Other Projects less than 10 userdays	21 projects	65
Total		292

* 1 userday equivalent = 8h of remote access support

SCIENCE PROJECTS USERDAYS FUNDING BREAKDOWN



RESIDENT POPULATION 2015-2020



STAFF CHANGES AND UPDATES



New hires:

- New Maintenance, Equipment Support & Fabrication Lead: Joe Franich
- New (returning) Logistics Coordinator: Pete Reynoldson
- Temporary hires for logistics help and camp support during winter months

Changes:

- Brett Biebuyck left for a position at RMBL
- Jason Stuckey left to pursue new opportunities
- Expeditor position vacant
- Logistics department overseen by Skye Greer

Active recruitments:

- Outreach/Communication Manager
- Web developer/Programmer
- New GIS/Remote Sensing Technician

YEAR OF COVID...



- Camp closure mid-March: Decision directed by UAF and State of Alaska
- Camp operations and remote access during closure with TFS core crew
- Close collaboration with NSF, Arctic Logistics Contractor, UAF to come up with a safe plan to re-open
- Remote Access planning
- Town Hall meetings
- Target to re-open on July 15
 - Requirements: 14-day quarantine, 2 negative PCR tests
 - Quarantine and testing coordinated by NSF Contractor

LOGISTICS OVER-PHEW!



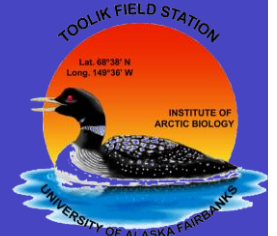
All Fairbanks-based TFS staff took part in the 2020 logistics crew this summer; special thanks to Randy, Rowan, Tori, Sam, Faye, Collin, Colin, Justin, Chad, Faustine, Amanda, Matt, Cézanna, Dave, Scott, and Mike for cheerily jumping in to help move trucks and people and things around town!



- Only **23** northbound trucks March- September vs **103** in 2019
- Relied heavily on Northern AK Tour Co to get freight and supplies back and forth on a weekly basis since our regularly scheduled truck runs were anything but regularly scheduled
- We'll bring the departure to you: Most departures ended up launching from quarantine hotels, we'll probably do that again in 2021
- Welcome back, Pete! Peter Reynoldson re-joined us in August as the Logistics Coordinator, and we can now call him "Pete 2.0"

Stevie Goetz and Skye Greer dropping off piles of freight at NATC for no-contact delivery to Toolik

FAIRBANKS LOGISTICS HAS OFFICIALLY MOVED



After 200* years operating out of Atco trailers in Fairbanks, we're happy to have moved into a Real Building, with regular amenities, and a **HUGE GARAGE SPACE!**



- So warm!
- So fancy!
- So easy!



- Lots of square feet of warm, indoor work space
- Lots of space for warm storage, secure storage, dry storage, and organized storage
- Thawed trucks are easier to work on! Changing a bulb in a headlight should once again be a 'minor' activity, no hand-warmers needed



*may not be entirely accurate

New digs: 2120 N Koyukuk Dr

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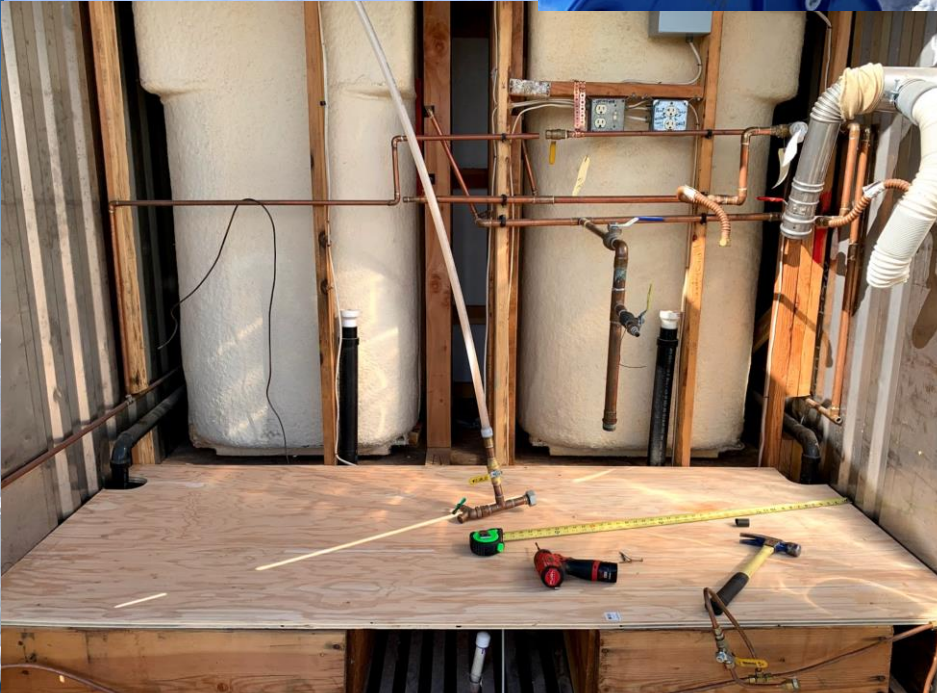


- Camp re-opened to users on July 15
- Population peaked at 43 on July 27, and stayed in high 30s until ~8/20
- Staff/user ratio ~50%
- Construction activities greatly reduced, but some work was completed in the fall

MAINTENANCE/FABRICATION HIGHLIGHTS



- Helo shed insulation so it could be utilized as a food shipment quarantine facility
- Sauna repair completed
- Significant spring snow removal (high winds, significant snowfall)
- Repaired shower module plumbing damaged by freezing (in time for opening)
- Repaired significant glycol leak in Cottongrass, identified undersized transformer issue for the heating system controls.
- Only eight tire repairs!
- Old tire shop remodel for future installation of composter
- New tire racks were fabricated to make for more room in Cold Storage
- We procured two cordless electric ice augers



BUILDING COMMUNITY

- In person and virtual users forum
- One Trivia night with 99.99% attendance
- Inclusivity/diversity meeting
- Community bike/canoe/run to support the Arctic National Wildlife Refuge in late July



2021 UPDATES



COVID impacts:

- Quarantine, testing, mask mandate
- Population cap – submit reservations early
- Housing: Keep 1 person per room
- Some changes in the kitchen services

NEW PROJECTS IN 2021



- NSF projects:
 - Arctic Stream Networks as Nutrient Sensors in Permafrost Ecosystems – Ben Abbott
 - Post-Doctoral Fellowship: Leaky landscape – Ariel Shogren
 - Phosphorus/Iron in the Arctic – Elizabeth Herndon, Mike Weintraub
 - Disturbance regimes in the New Arctic – Mark Lara, Melissa Chipman
- Alaska DGGs/USGS Rooftop Ridge - mapping project – Amanda Willingham
- BBC Frozen Planet II Bumblebee project
- WCS Wolverine survey and BBC Mammals – Martin Robards/Tom Perry
- Interactions between erosion and permafrost thaw – Eitan Shelef

THANK YOU!

