



Special Events Update

September 18, 2019


Roger Egan – VA3EGY

Topic: Fox Hunting, Transmitter Hunting and ARDF



Agenda

- Spring Transmitter Hunt – Survey Results
- Opportunities Abound
- Next Steps – Walk before we Run!
- Observations from the Field
- Is this a big deal?
- Questions



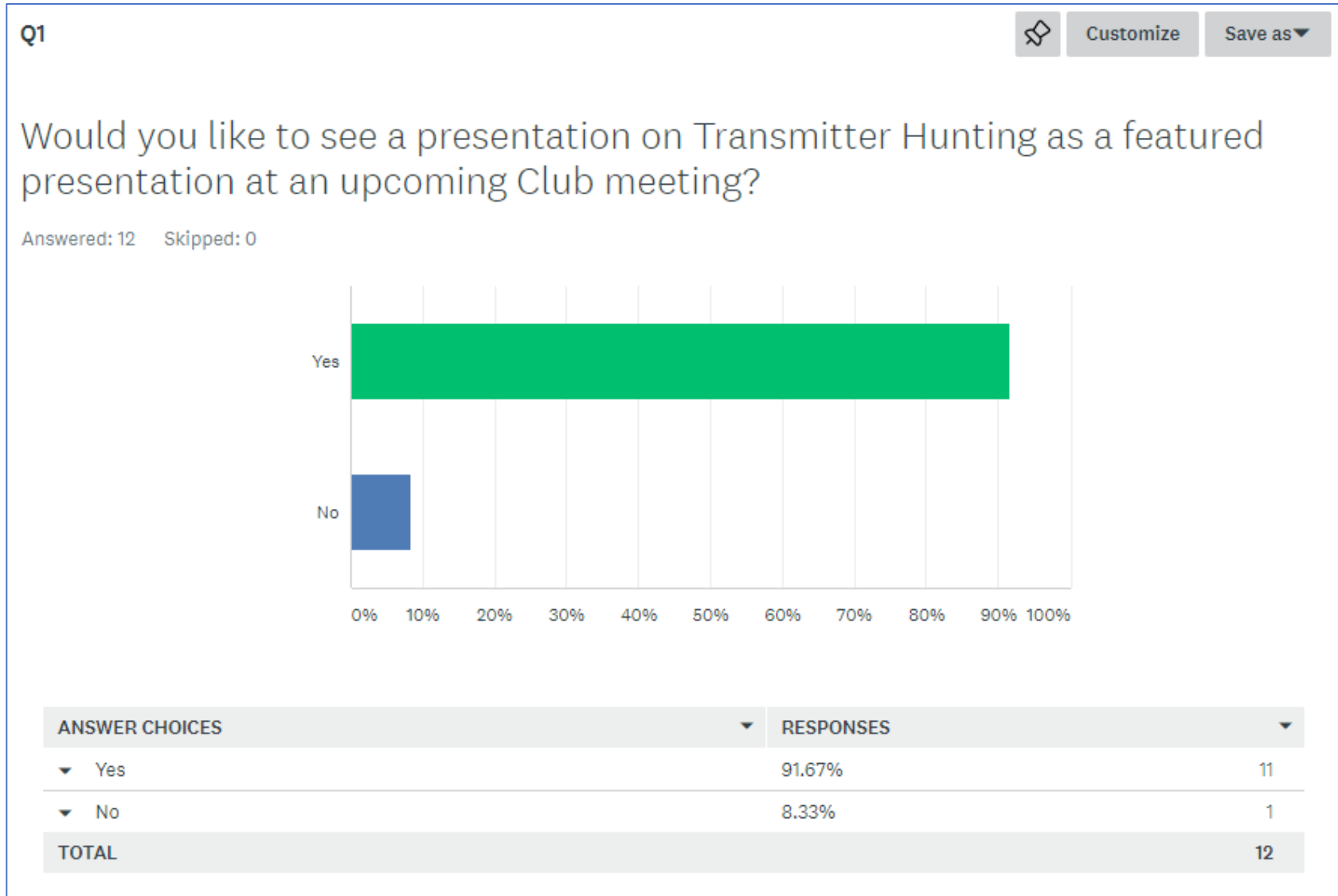
Survey
Results

Spring Transmitter Hunt - Survey Results

Details:

- Delivered May 27th via link to SurveyMonkey on ovmrc.groups.io/g/main/topics
 - <https://www.surveymonkey.com/r/LZJNMYX>
- 10 questions (one was to optionally identify)
- Survey is still open

A formal presentation is being planned



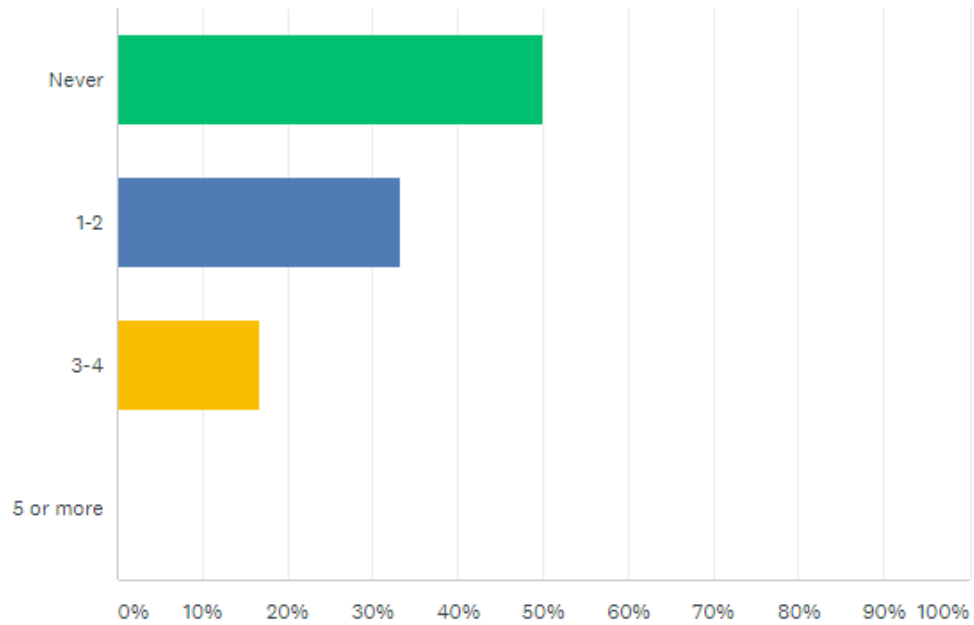
Half said never participated

Q2

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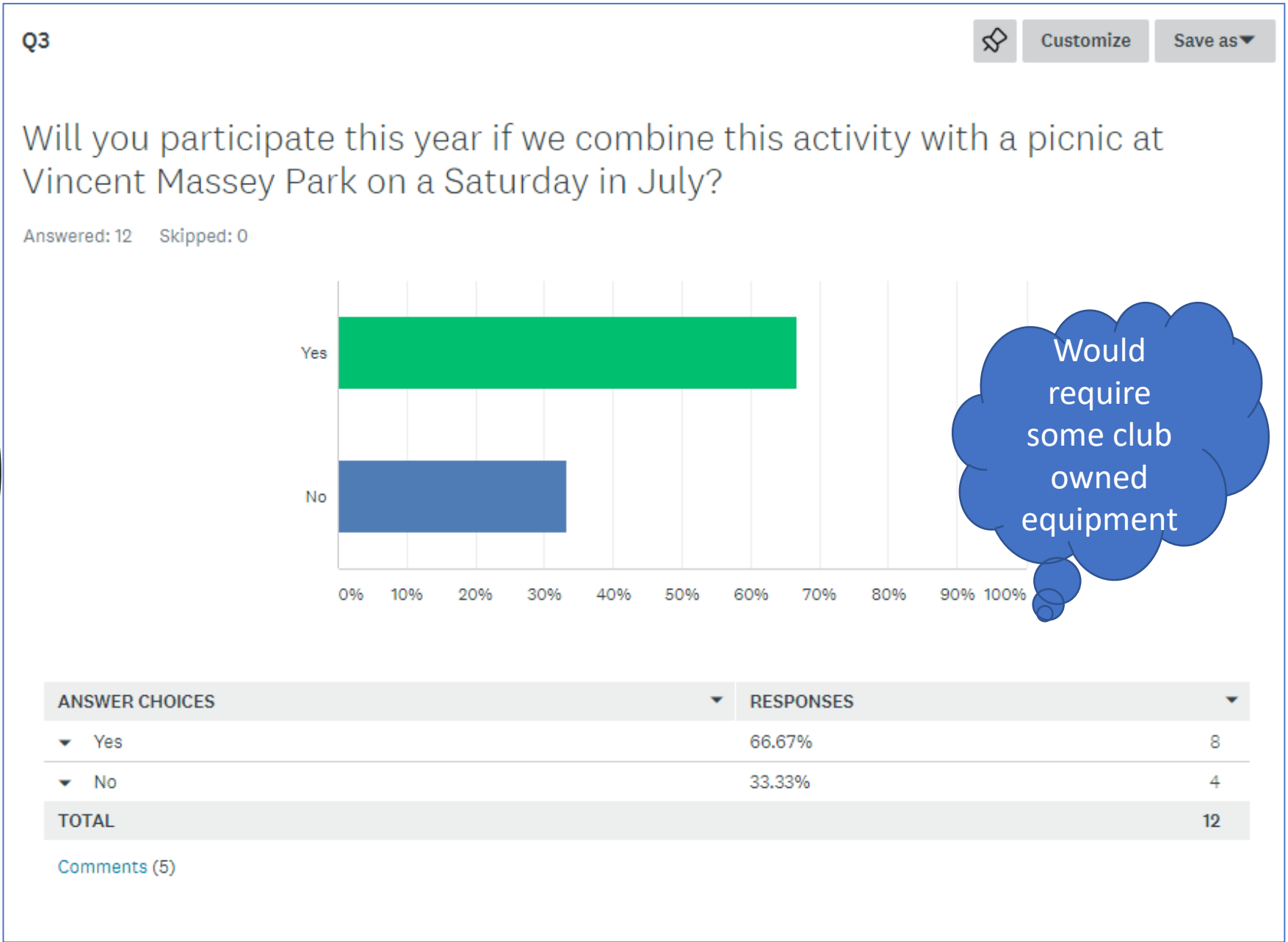
How often have you participated in a Transmitter Hunt in the past?

Answered: 12 Skipped: 0

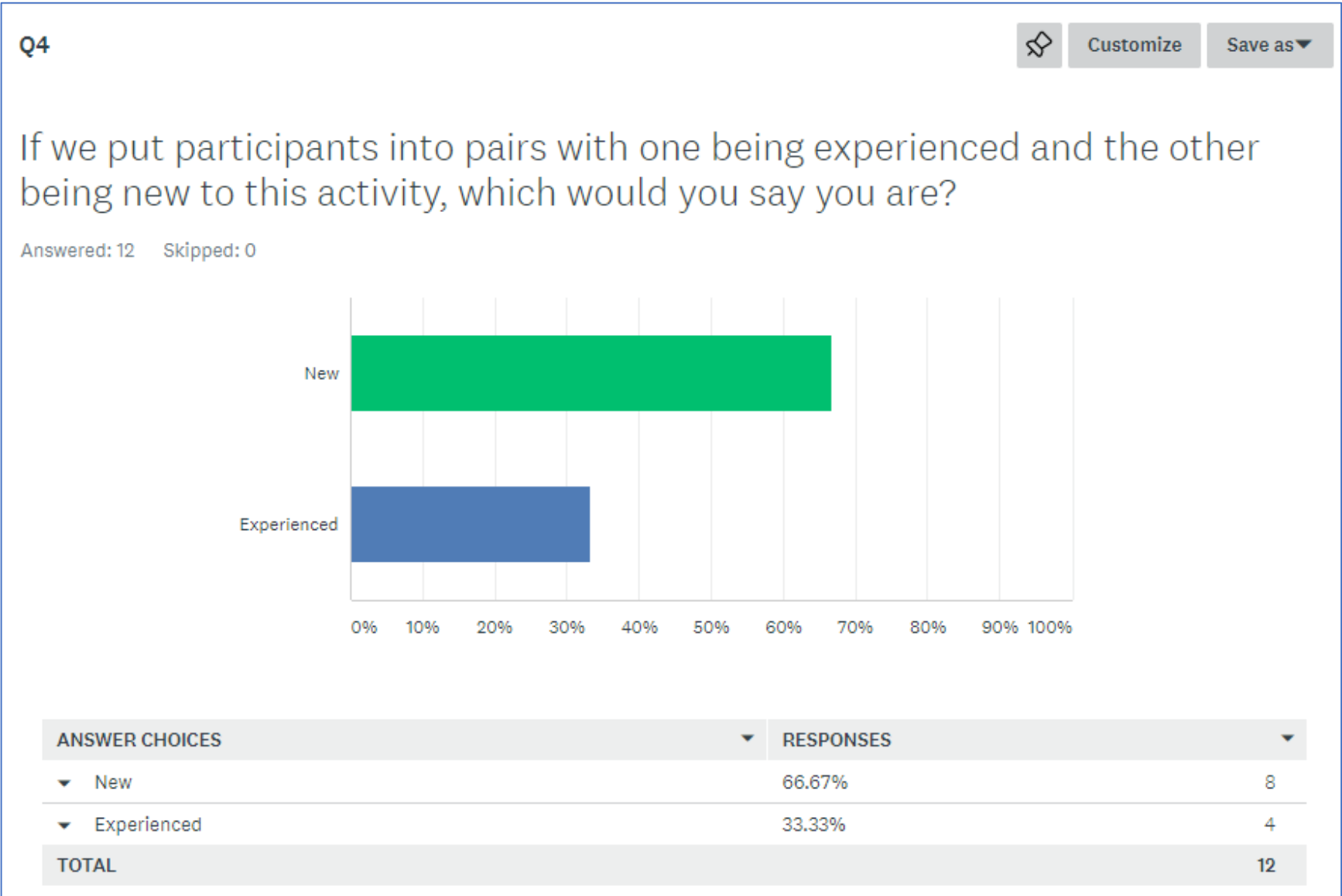


ANSWER CHOICES	RESPONSES
Never	50.00% 6
1-2	33.33% 4
3-4	16.67% 2
5 or more	0.00% 0
TOTAL	12

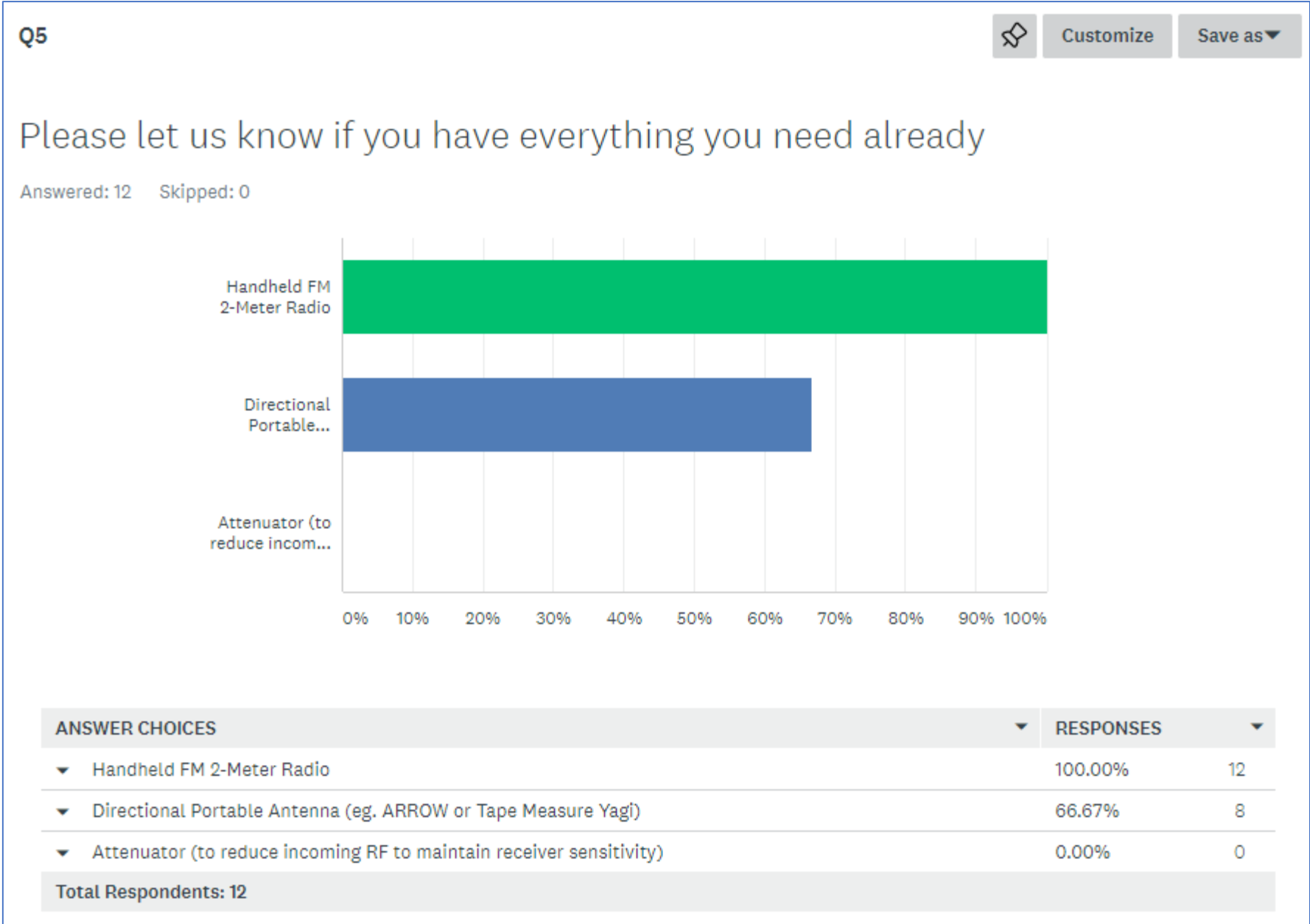
2/3 would participate in a fun park picnic format



Most rate themselves as new or little experience



If using HT, some need antenna, all need attenuator



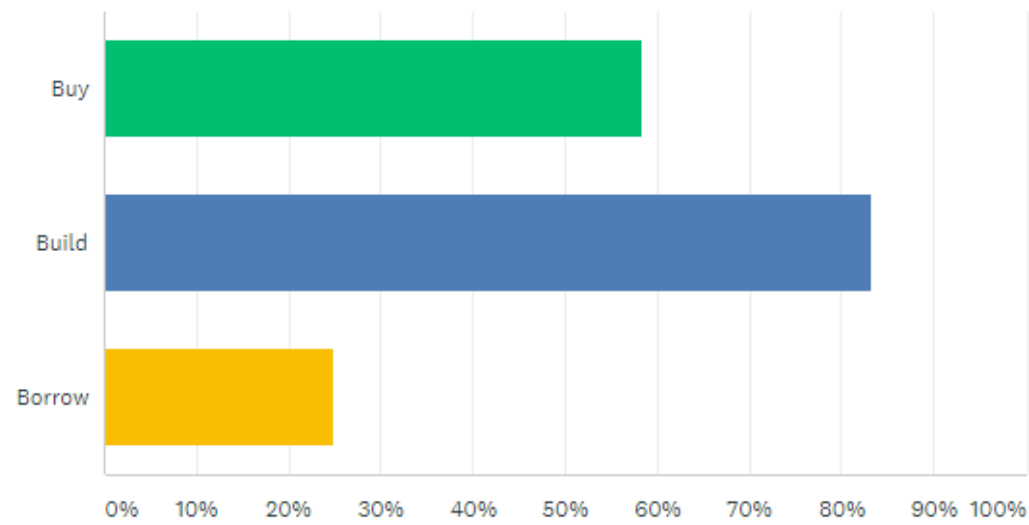
Most would like to build, some will buy but other would like to borrow

Q6

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If you don't have everything you need, how will you acquire it in time for this event?

Answered: 12 Skipped: 0



ANSWER CHOICES	RESPONSES
Buy	58.33% 7
Build	83.33% 10
Borrow	25.00% 3
Total Respondents: 12	

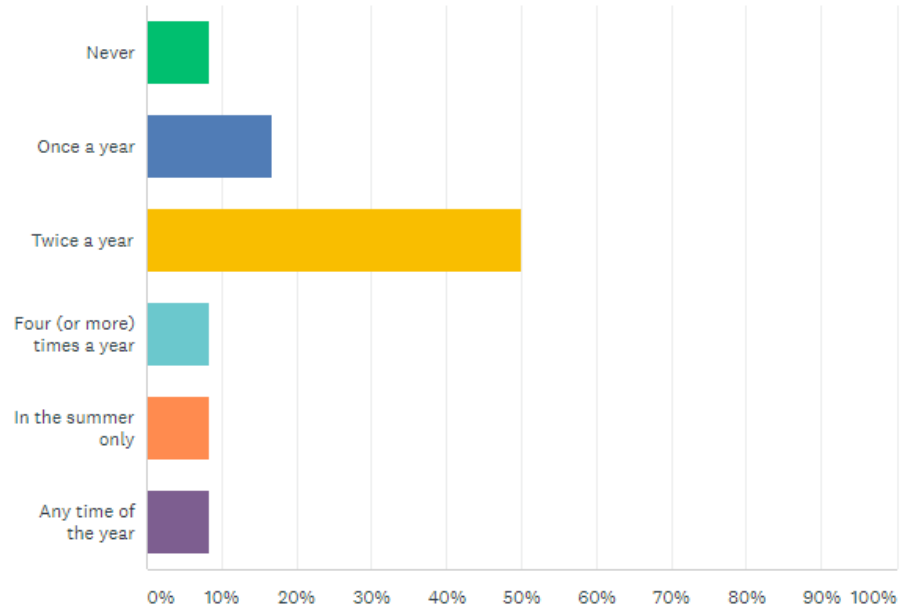
Half said 2X a year, 17% said 1X and almost 10% said 4+ times

Q7

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How often would you like to participate in this activity if we did Transmitter Hunts on a regular basis?

Answered: 12 Skipped: 0



ANSWER CHOICES	RESPONSES
▼ Never	8.33% 1
▼ Once a year	16.67% 2
▼ Twice a year	50.00% 6
▼ Four (or more) times a year	8.33% 1
▼ In the summer only	8.33% 1
▼ Any time of the year	8.33% 1
TOTAL	12

Overwhelmingly want to include Friends, Family and new HAMs

Q8

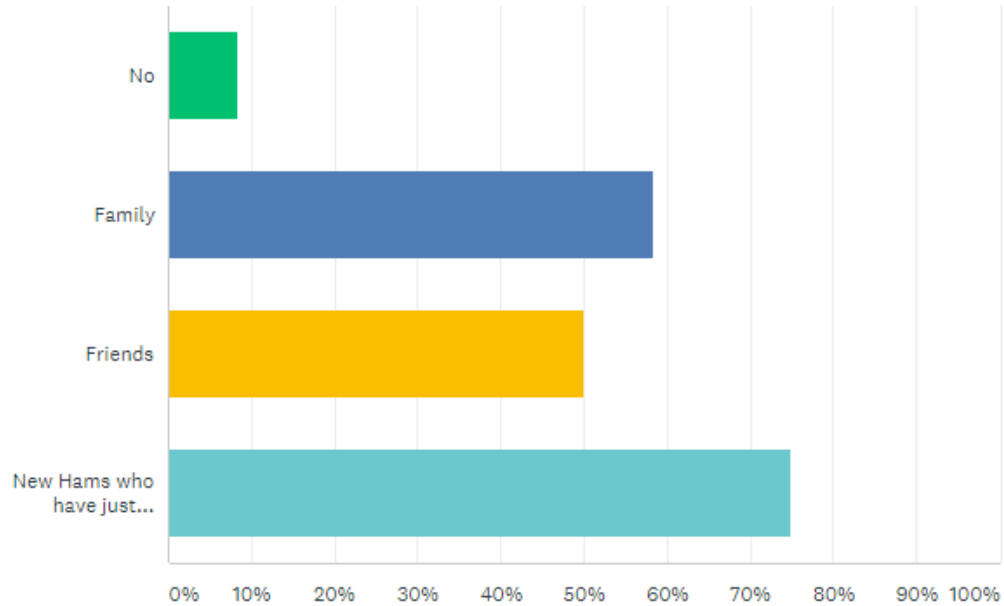


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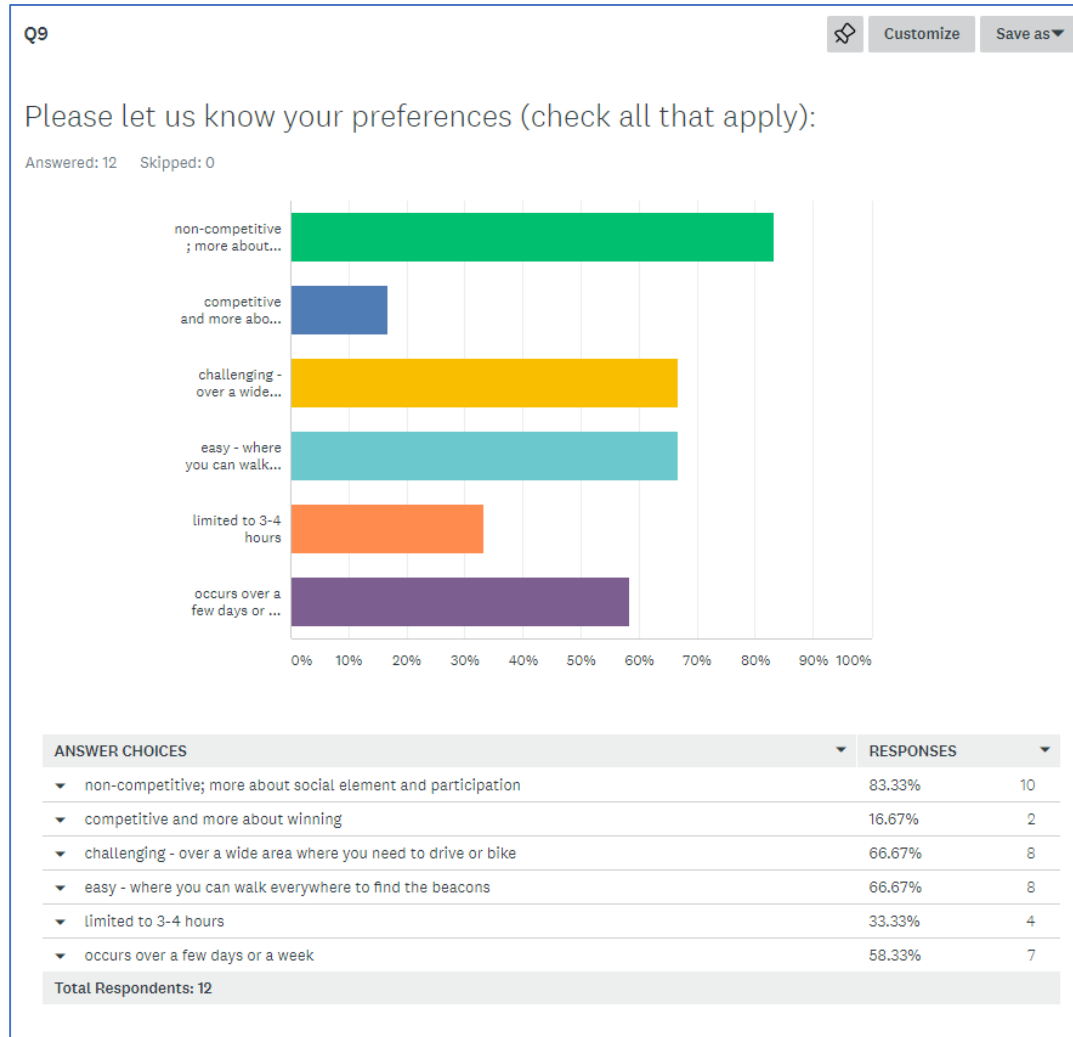
Would you like to include non-members in this activity? Check all that apply:


Answered: 12 Skipped: 0



ANSWER CHOICES	RESPONSES
▼ No	8.33% 1
▼ Family	58.33% 7
▼ Friends	50.00% 6
▼ New Hams who have just passed the basic course in the past year (or two)	75.00% 9
Total Respondents: 12	


Wow! Lot's of diversity in type of events requested!





Opportunities
abound!

- Club Project(s) - Building Equipment; kits and from scratch
- More internal and cross-club events
- Something for everyone; youth, new and existing members
- Public service outreach to pedestrian and institutional groups
- Positive public exposure to Amateur Radio in Action
- Generate awareness & interest in Amateur Radio Hobby
- Promote our Amateur Radio Basic Certification Course
- Create a sustainable sub-group within the club for Youth
- Volunteerism – Organizing and Delivering ARDF Events



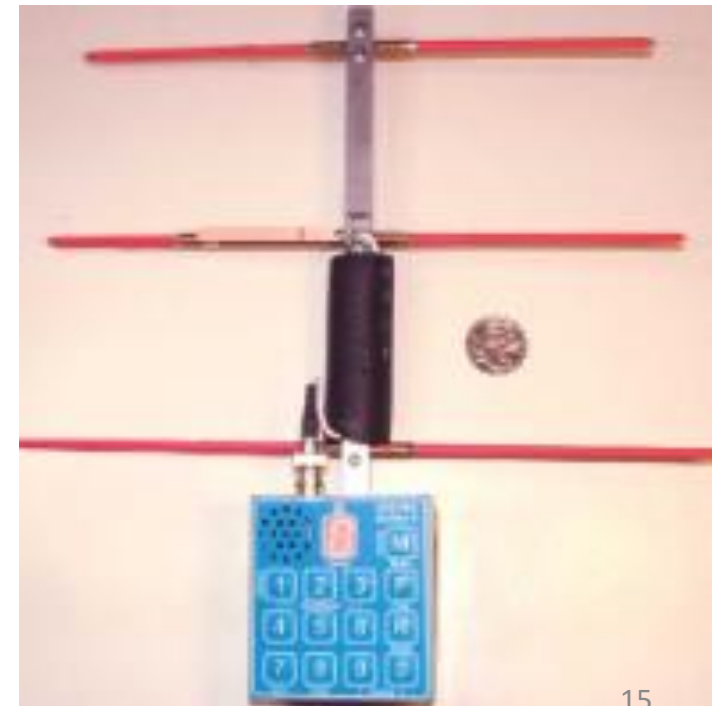
Next Steps...
Walk before
we run!

- Find out more at:
https://en.wikipedia.org/wiki/Amateur_radio_direction_finding
- Let's get the conversation going at Groups.io
- Develop the Organization for Technology Selection and acquisition
- Consider the Options, Cost vs Time to Availability considerations
- Develop the Organization for Event Planning
- Options, Cost, Schedule, Volunteers, Promotion, Day-of execution, Reviews
- For Consideration (Green Light)
 - Community Engagement
 - Scouts (JOTA)
 - Cadets
 - Summer Camps – City, Christie Lake Kids, etc.
 - Schools - Cross County Events
 - Public ARDF Events
- Possible Constraints (Red Light)
 - Risk and Liability
 - Funding
 - Lack of Interest?

Observations from the field

Introducing - Emily Panter VK3ACM – from Melbourne, Australia

- Recently wrote and passed the Canadian AR License exam (@Carp Hamfest)
- Her Ontario Callsign is VE3EMI
- Very experienced in ARDF
- Builds her own ARDF gear
- Has connections – VK3YNG (<http://www.foxhunt.com.au/>)
- Brought her kit to Radio in the Park in Kanata last weekend to demo
- Lots of people gave it a try, even some pedestrians and families



Is this a big deal?

22nd IARU Region 1 ARDF Championships 2019

Category: ARDF |

Published: Wednesday, 18 September 2019 07:43 |

Written by S57CT |

Hits: 65 |



This year the Slovenian Amateur Radio Society ZRS hosted the 22nd IARU Region 1 ARDF Championships in Rogla. The Championship was accepted two years ago and its preparations were carefully managed by the preparations committee. For the Championship itself we selected Rogla - a high mountain location, better known for its skiing and snowboarding competitions, and other winter recreational activities it has to offer. 26 teams from Austria, Belarus, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, Germany, Great Britain, Hungary, Kazakhstan, Lithuania, Moldova, Netherlands, Norway, Poland, Romania, Russia, Serbia, Slovakia, Slovenia, Sweden, Switzerland and Ukraine from the IARU Region 1 member societies came to our ARDF Championship in Slovenia, as well as a guest competitor from the USA, who competed out of competition.

Region 2 – Americas

- There is quite a bit of activity in the US and Mexico
- And an ARDF Canada Organization: <https://ardf.whyjustrun.ca/pages/94>
- But only in BC! I can't find anything anywhere else in Canada.
- They have an ARDF 80m receiver and transmitter construction projects!

Questions?





Special Events Update

October 16, 2019

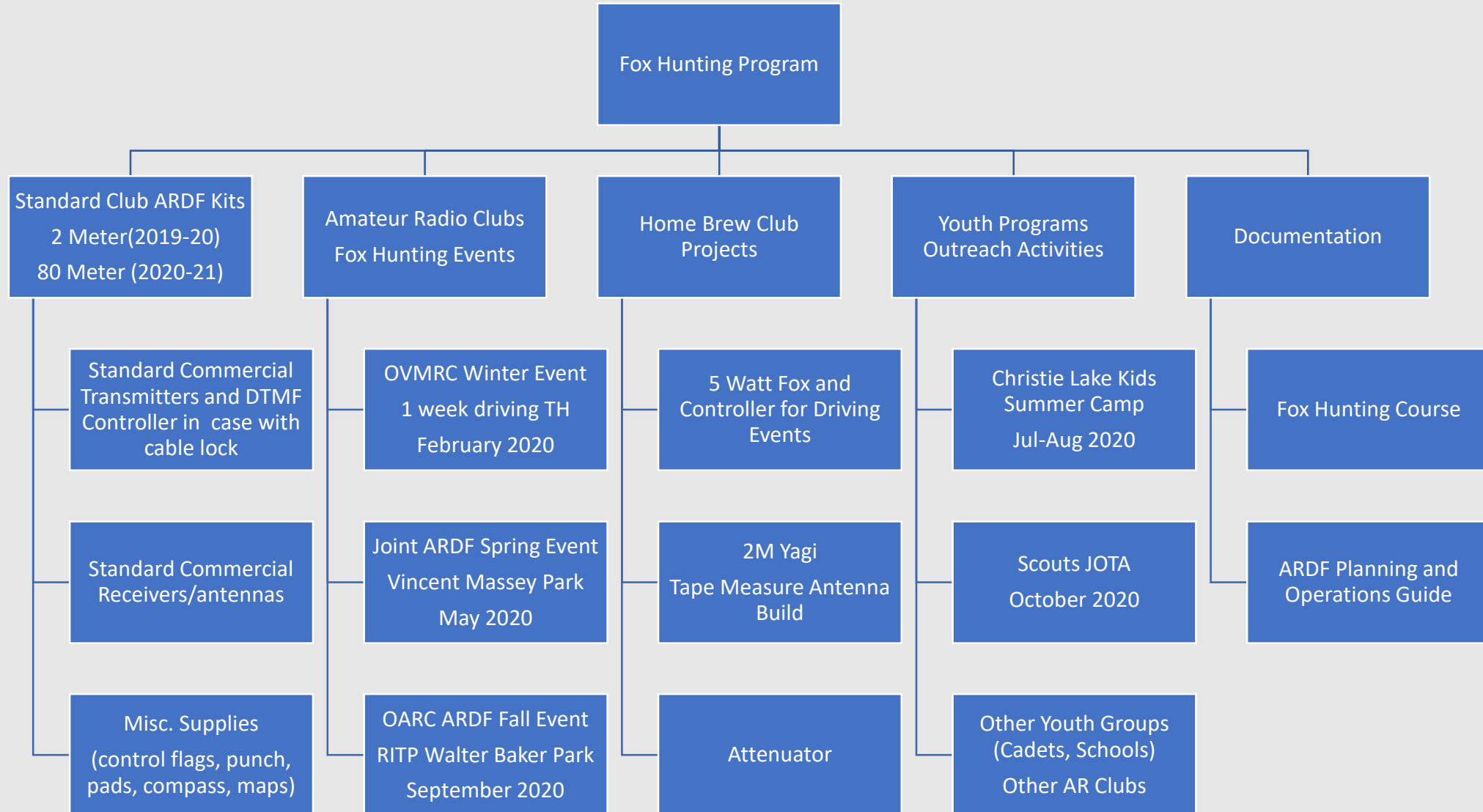
Roger Egan – VA3EGY

Topic: Fox Hunting, Transmitter Hunting and ARDF

Benefits of Developing a Fox Hunting Program

- 12 month plan, budget, formal approval, volunteer assignments, regular updates
- Opportunities for everyone; plan, design, build, implement & support
- Includes...
 - Internal Club activities
 - Cross Club activities
 - A Youth STEM Activity that is Fun, Outdoors, Educational, Repeatable and Scalable
- Partnering with pre-existing groups like CLK, Scouts, etc. means we don't have to worry about advertising or recruiting participants
- Enables new Hams to get involved in our Club, with something specific, working with existing members as mentors and without having to buy any equipment
- A positive public image of Amateur Radio within our community which may also inspire interest in Amateur Radio, future careers in STEM and new Club members.

2019-2020 Fox Hunting Program - Overview



Fox Hunting Program Deliverables

- Overall Plan
- Budget
- Fox Hunting Course
- Club Fox Hunting/ARDF Equipment purchase for newcomers & youth
- Equipment building Workshops for members who want to own
- Fox Hunting Event Planning and Operations Guide
- Fox Hunting Events for Members
- Fox Hunting Events for Youth Organizations
- Home Brewing opportunities for more experienced Club members

Proposed Club Fox Hunting Equipment - Transmitter

Transmitters for Walking/Running ARDF events

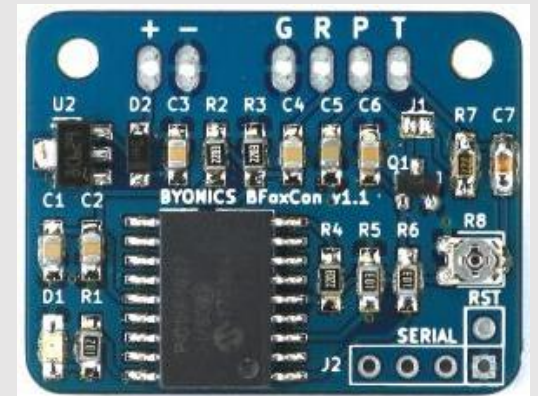
- 2 meter – Byonics MicroFox 15 USB Combo (\$105 USD)
 - The Byonics MicroFox line of transmitters include both a transmitter and a foxhunt controller in one device to make putting on a hidden transmitter hunt easy. Just connect to any 2-meter SMA antenna, add a battery, configure with your callsign, and hide the transmitter.
 - The MicroFox 15 is a 15mW T-Hunt transmitter capable of transmitting on any 2-meter frequency (144MHz - 148MHz). It can be heard over 3 miles away, so it's great for a walking or ARDF style hunt. A standard 9V battery should provide about 20 hours of use at a 50% duty cycle. With the USB or serial programming cable and Windows configuration software, the user can control all timing, tones, and Morse Code ID.
 - For more information visit <https://www.byonics.com/mf>



Proposed Club Fox Hunting Equipment - Transmitters

Transmitter Controllers for Driving Transmitter Hunt Activities where more power is required – also from Byonics

- PicCon - turn any transceiver into a hidden transmitter. It sends tone sequences and Morse code messages at user-programmed times and is configured and remote controlled with DTMF tones. A radio/power cable is required to interface to the radio mic/PTT and ear/speaker jacks, and to a 12V power supply (\$66 USD)
- BFoxCon Baofeng Foxhunt Controller - designed to pair with the inexpensive Baofeng UV-5R to create a hidden transmitter for driving hunts. It mounts to the back of the radio in place of the belt clip and can be powered from the UV-5R battery (BL-5L 3800mAh recommended). It can be configured with the optional USB-2.5 cable, or remote configured and controlled with DTMF tones. A DIY version is available for use with any amateur radio. (\$55 USD)



Proposed Club Fox Hunting (ARDF) Equipment

2 meter ARDF Receiver (no transmitter which is ideal for youth)

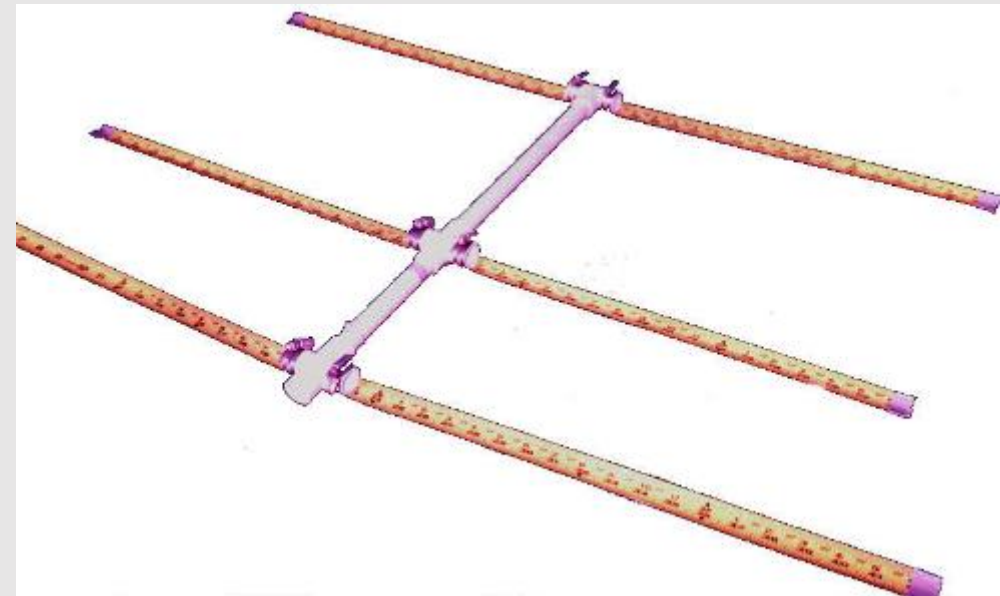
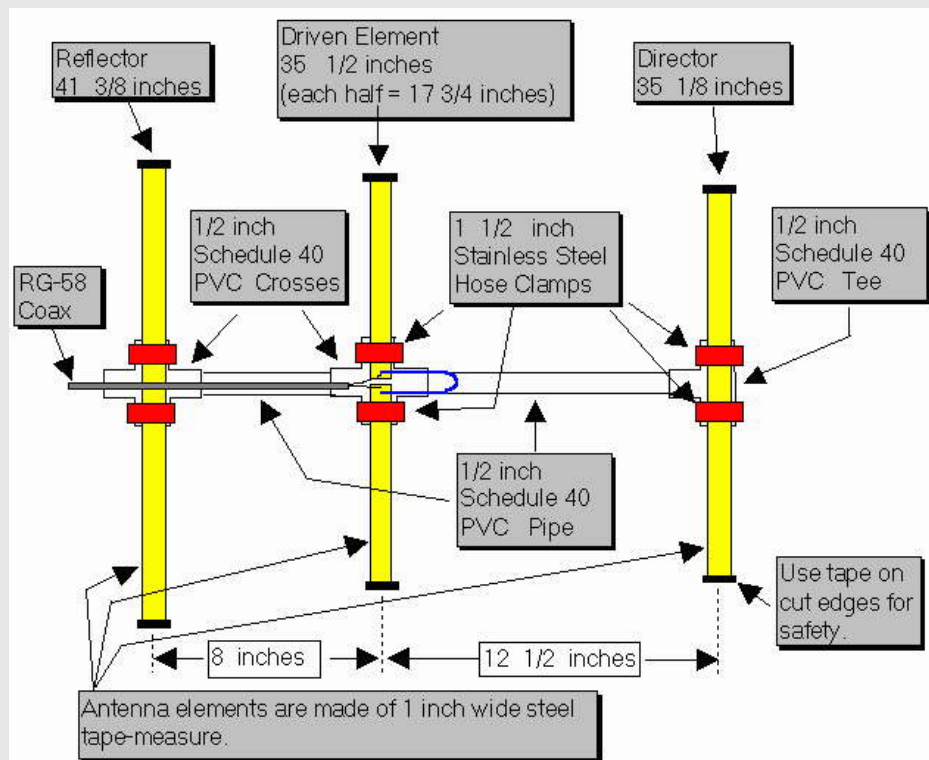
The most popular one-piece set among ARDF Team USA members is the frequency-synthesized Sniffer 4 from Bryan Ackerly VK3YNG in Australia (photo at right). It covers both the full two-meter band and the 120-123 MHz aircraft band with selectable AM, FM or audio S-meter tone output to the loudspeaker. You can listen to both the receiver audio and S-meter tone at the same time with stereo earphones. It includes automatic-ranging attenuation in 15 dB steps. For multiple-frequency hunts, there are six programmable memories. Sniffer 4 is lightweight and easily attached to the RGE VHF-144 antenna (see below) or a home-built measuring-tape beam. Cost with shipping to the USA is just over US\$200. A detailed product review by KØOV is in Homing In for Fall 2007 issue of CQ-VHF Magazine. Sniffer4 is available directly from Bryan Ackerly in Australia. Bryan quoted me \$165 Cdn and could do better on qty 20.



Proposed Club Fox Hunting (ARDF) Equipment

Tape Measure Yagi Antenna Plans

http://theleggios.net/wb2hol/projects/rdf/tape_bm.htm



Proposed Club Fox Hunting (ARDF) Equipment

Signal Attenuator

<https://kc9on.com/product/fox-hunt-offset-attenuator/>

- As a kit (\$8 - 12USD)
- Or Assembled (\$20-30USD)



Proposed Club Fox Hunting (ARDF) Equipment

Scoring Equipment

For decades, orienteering competitors have proved that they visited their required controls by carrying a card that they mark with special punches at each one. Each punch has a unique pattern of perforating pins (photo at right). Radio-orientees adopted the same system because the punches are inexpensive and durable. For informal practice sessions, they sometimes substitute colored pens or crayons.

The pin-punch system has worked well over the years, though it seems that at least one runner loses the card on every hunt. In a local event, he or she will just punch the map and move on. However, the rules of national and international championships usually state that a lost card means disqualification. Another pin-punch problem is that occasionally a competitor will not squeeze punches firmly around the card, making it difficult or impossible to verify the correct pin pattern.

Electronic Scoring

Classic orienteers are moving into the 21st century by adopting an electronic scoring method usually referred to as "E-punch." The most popular system is [SPORTident \(SI\)](#). Here's how it works: Competitors wear a uniquely coded plastic tag called an "e-stick" or "dipstick." At the start line, finish line and at each fox found, they insert this tag into a SI control station (also called a transponder), which writes the location and exact time onto a chip in the tag using RFID technology (photo at top of page). After they "punch in" at the finish, they insert the e-stick into another control station at the scoring tent, where a laptop computer retrieves all the time data from the tag. The computer operator immediately prints out and gives the competitor a slip of paper with his or her overall elapsed time and splits (the elapsed time to find each fox).



Proposed Club Fox Hunting Equipment

Similar to Orienteering, equipment can include:

- Clip board
- Site topographic map
- Compass
- Pen
- Ruler
- Push pins





Events

Fox Hunting Course

Club Fox Hunts

Community Outreach

×

FOX HUNTING 101

RADIO DIRECTION FINDING TECHNIQUES

SAFETY FIRST!
WATCH YOUR SURROUNDINGS—
ESPECIALLY WHEN DRIVING



JOTA-JOTI – Saturday Oct 19 and Sunday Oct 20, 2019



- Jamboree on the Air, or JOTA, is an annual Scouting event that uses **amateur radio** to link Scouts around the world, around Canada, and in our own community.
- Held on the third full weekend of October each year
- At Scouts Headquarters – Museum - 1385 Baseline Rd
- JOTA started in 1958 (with the World JOTA Bureau located right here in Ottawa, Canada). .
- In short, it's the best way to talk to half a million Scouts and Guides without having to leave your own community!



<https://www.scouts.ca/programs/international-programs/jota-joti.html>

Christie Lake Kids – Summer Camp



- Every year, almost 400 children and youth aged 9 - 15 attend two weeks of summer camp at the picturesque 88-acre camp near Perth.
- All activities are geared towards the development of physical and socio-emotional skills, and programs are fully subsidized for families living in low-income.
- In 2019, camp sessions were:
 - July 2 - July 13
 - July 17 - July 28
 - August 1 - August 12



- For more information visit:
<https://www.christielakekids.com/programs.php#campAbout>



Youth Fox Hunting Activity Outline

Objectives

- Teamwork, critical decision making, learning to use and taking care of fragile Radio and other equipment
- Skill development (strategy, planning, map reading, compass reading, radio equipment use)
- Learning how Radio is used to track a target (wildlife research, SAR, surveillance, ARDF sport, RF interference)
- Physical activity

Proposed Approach

- Mid-week or weekend; instructor stays 2 days (overnight at camp)
- Each session is 3 hours; morning and afternoon; 4 sessions per week for 6 weeks or 24 sessions total
- 10 teams of two or 20 kids/session for a total capacity of 480 kids over 6 weeks
- 30 minute instructions, team selection, equipment handout
- 2 hour event with teams leaving in short intervals to each of 5 Foxes in sequence
- Transmitters voice announce “I am Fox 1”, “I am Fox 2” ...”I am Fox 5” every 10 seconds
- The max wait time for each team is one minute to get a fresh bearing on their current Fox
- 30 minute session wrap up - equipment return, debrief and announcement of winners.



Fox Hunting Activity- Participant Guide

- Participants will carry a card with a Team Name, Participants names and 5 squares
- Foxes will be marked with a flag and have a punch secured to the control point
- Participants will punch the square corresponding to Fox location marker to prove they found it
- At the end of 2 hours, all Foxes will be silent and a homing beacon will commence to bring all remaining participants back to the start.
- Participants should get a badge and the winning team from each session will get applause & prize
- There will be a 30 minute debrief (which will probably be condensed to 15 minutes by the time all the equipment is returned, the scores are recorded and winners are determined
- With 10 receivers, 4 sessions and participants working in teams of 2, we can handle 80 kids a week or 160 kids every 2 week session which and the typical camp session has about 130-135 kids
- If each club (OARC and OVMRC) purchases 10 receivers, they could be combined so each participant would work on their own but if not, then they would work in teams of 2 and share.

We need Volunteers

- Overall Program Manager – Roger Egan
- Standard Club ARDF Equipment - TBD
 - Evaluate, Recommend, Purchase, Custom Case/Secure Packaging
- Documentation - TBD
 - Fox Hunting 101 Course and Planning/Operations Guide
- Club Events – TBD
- Youth Program Development – TBD
- Club Projects - TBD

Volunteers on the Horizon...

People who have said they would like to help

- Chris Rochefort –VE2MW -
- Rob Haddow – VE3RXH -

People who are already involved with Youth Programs

- Harrie Jones – VE3HYS –
- Chris Bisailion – VE3CBK –

People with unique skills and prior experiences that we can use

- Neil Herber – Documentation/Training - VE3PUE -
- Emily Panter – ARDF & Sniffer4 receiver experience from Australia - VE3EMI

Questions?



Optional Slides

Proposed Club Fox Hunting Equipment

Transmitters for Walking/Running ARDF Events

- 80 meter Option
- Receiver Options
 - <http://www.crkits.com/>

[R3500D ARDF Receiver \(Assembled\)](#)

Unit Price: **39 USD**. Shipping and Handling: **20 USD**.

[Add to Cart](#)

