

Rockets of the Corn and How to Find Them

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Introduction

It will soon be that time of the year, the one where the corn is either up to your knees or above your head. Finding rockets in crops (or even tall grass) can be a challenge. Some club members have trackers, GPS devices and other sorts of transponders in order to help them find their lost rockets. That's great. But what if you're just starting out or can't afford one or don't know if you want to purchase one of these just yet? Is there an inexpensive way to find a lost rocket? Well, the answer is yes. All you'll need is a cell phone with a compass app and a little patience.

The method I'm going to discuss is something called "walking a line". The critical word here is line. From HS Geometry students learn that a line is a figure that has two distinct endpoints which makes the line unique.

In order to establish the "line" your rocket is located on you'll need to pick two distinct endpoints for that line. To determine the endpoints your rocket lies on, you'll need to locate an easy to spot, fixed set of points both behind and in front of you. One of these you get to pick, the other, your rocket will pick for you. These points are important in finding your rocket. Good endpoint selection increases your chance of finding a rocket that vanished in the corn or grass. Choose wisely.

What to Use as Endpoints?

The one you pick

For the first point I like to use the club's flag pole. It's in a fixed location, distinct and can be spotted from most locations in the field in all but the tallest corn. It's easy to spot, and more importantly, it doesn't change location, unlike cars and pop-up shelters that may have moved or left during your search.

The one your rocket picks

To determine the other (far) endpoint you'll need to do a couple of things:

1. Watch your rocket as it falls and then note which part of the landscape it fell in front of. I usually use the trees on the edges of the field for this. I note which tree it rocket fell in front of and make a mental note about its size, shape and color. I also make a note of the trees to either side of the "target tree". This helps me locate the tree in a distinct group rather than just "a tree" by itself, which help make that point even more unique. After awhile the trees can start looking alike, so making a note of not only the tree, but the group of trees your rocket fell in front of can be a life (rocket) saver.

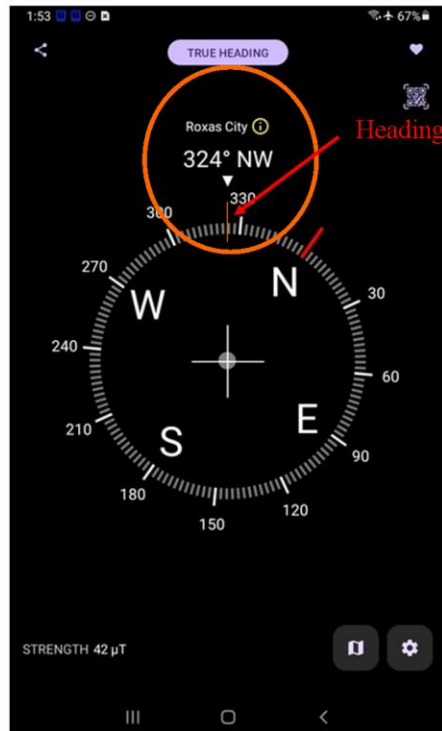
2. If you're quick with a cell phone, I also recommend taking a photo of the target tree. This is not necessary, but may come in handy if you need to re-orient yourself or point out to helpers where you believe the rocket landed.



Choosing a target tree and target group

Finding a lost rocket

Once you've established your endpoints, take out your cell phone with your back to your first (close) endpoint and establish the heading to the far endpoint. Using your compass app, hold your cell phone flat and parallel to the ground. Point it at the tree your rocket fell in front of and note the compass heading (read in a compass direction and degrees) trying to be as precise as possible. Take your time, your rocket isn't going anywhere and the better the reading the more successful you'll be in finding your rocket. Congratulations you have your line. Now for the fun part

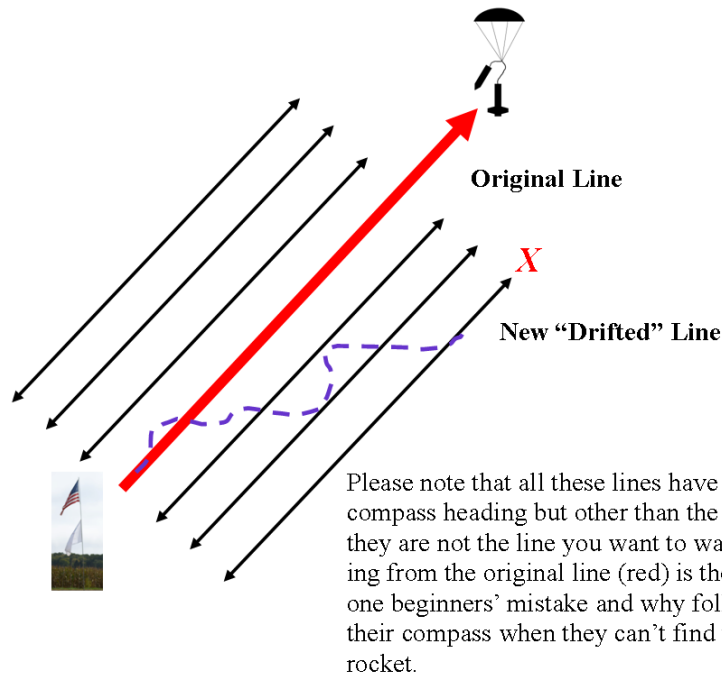


Digital Compass

Back to Geometry Class

Here's something folks forget about when walking a compass heading. We know that you've picked a unique line to walk in order to find your rocket. This works great when there are no obstacles to block your vision. The chances of wandering from that line are almost zero. But what about when you're in corn above your head and you can't see the point you were headed for? This is where you need to be careful and remember something about lines as related to your compass heading.

While the line you are walking is unique, there are an infinite number of similar lines running parallel to either side of it. Huh? So what? Well, in English that means if you step to either the right or left of your original line, while maintaining the compass heading, you are now off the original line, and while you're still heading in the correct general direction, you are a new parallel line and you may miss your rocket.



Parallel Line and Drifting Off Track

Corn can and will block your way and you'll need to step around it. The trick is to try to correct your drift by walking back to what you believe is the correct line. This may sound difficult, but it is not hard and you will have to use your best guess as to how far you drifted and how far you need to drift back to correct your course. This becomes easy with practice. My advice is to correct your drift as soon as you can. Waiting until 50' or more down the corn rows will really put you off course. It's best to do a series of small corrections ASAP instead of waiting until you see a clear spot to try. Even if you're wrong about the drift amount, you'll be closer to the original line if you correct early and often.

Slow Down

If your rocket is "buried" or falls through the corn, you'll need to slow down when you think you're getting closer. You can usually see through 5 to 8 rows of corn to your left and right when walking slow. If you maintain a normal walking pace it becomes more difficult to see "through" the rows, reducing your effective range down to 2 to 3 rows on either side of you.

If you're lucky the rocket will be hung up near the top of the corn where it's easy to spot, but they usually fall through to the ground or get hung up on an ear in the middle. So, slow down, look up and down the stalks and take your time. The results are worth it.

I Couldn't Find My Rocket

The good news is that it is still there, the bad news is that you probably drifted too far off your line and need to try again.

Finding a rocket in the corn can be difficult and requires practice. Sometimes the corn blocks your progress you may have forced you to drift off course more than you realize; sometimes you might have walked right past it, and other times you didn't walk far enough. Don't give up, try again!

Go back to the flag pole (Or whatever you chose as your endpoint) , line up on that tree or other landmark you chose and re-establish your line, head out trying your best not to drift. Remember to slow down, correct your drift incrementally and do whatever it takes to stay on your original line. It may take 2 or 3 tries, but this method works.

The rewarding part is sometimes while you are recovering your rocket; you also find and recover other lost rockets. (All things being equal, rockets tend to float the same way, so this may happen.) If you do find another person's rocket, please bring it in. Trying to remember where exactly you found it is very difficult. Bringing the airframe back to the RSO tent takes less time and is very much appreciated.

Pointers

When you go out to recover your rocket from the corn please make sure you're wearing something with long sleeves and take a bottle of water. Pushing your way through corn leaves will give you "paper cuts" on your arms, resulting in a "rash" that takes several days to heal and stop being irritating. Wearing a jacket or long sleeved shirt will prevent this.

Taking a bottle of water with you when you go out to recover your rocket is always a good idea. In hot weather, it can be very humid and stuffy inside the rows where you'll dehydrate faster.

Cheap Help

There are a few things you can place in your rocket that don't cost as much as a tracker and will definitely help in locating it.

Adding a 10 to 20 foot length of bright colored plastic construction/ boundary marking tape streamer helps a lot. It is light weight, easy to pack and usually doesn't fall through the corn as it tends to drape itself across several rows making spotting your rocket much easier.

Another relatively inexpensive solution, is equipping your rocket with a sonic beacon. These small devices are a huge aid in leading you to your rocket. Most can be heard within 50 to 75 feet inside the corn rows (further outside). You can find several models of sonic beacons at [www: apogeerockets.com](http://www.apogeerockets.com) and other rocket supply vendors. Many will fit in smaller airframes.

If you are flying a larger diameter airframe, an alternative option would be to use a compact personal alarm with a pull pin. These are larger than most sonic beacons and will not fit in smaller models. To use one of these devices, you attach the alarm to your nose cone eyebolt (or other attachment type) and attach the pin to the shock cord , so that when the cord goes taught (after deployment of the parachute) , the pin is pulled and the alarm sounds.

Conclusion

Finding your rockets in or behind the corn rows or in deep grass is not overly difficult once you establish your "line" before walking out to retrieve your model. With a bit of practice you'll be walking right to your rocket in no time. I'm sure, over time, you'll find you'll probably find better methods, but this is a good place to start. Best of luck beating the rocket eating corn.