

Camp Samac Outdoor Range Captain's Guide – Safety

A Range Captain's role is to **ensure the safety of everyone present** by watching the archers, the firing line and the range for potential hazards. The Range Captain is responsible for proper range setup, giving everyone the safety briefings, and proper range take-down including setting aside damaged equipment and locking all equipment up. The Range Captain also ensures the equipment trailer is locked at all times.

A Range Captain's role is not to make friends, talk to other leaders or staff, watch the targets, or coach archers.

Range Captains should **wear a high-vis vest** from the time they enter the range so everyone knows who is in charge.

The essential safety briefing in the box below must be communicated to everyone setting foot on the range every time they come to the range, whether they are planning to pick up a bow or not.

You don't need to review these next points with archers, but be aware as they can impact everyone's safety.

- It is not safe to use the outdoor range if there is any risk of **thunderstorms**. Rain isn't good for the equipment, slippery grass isn't safe for people holding pointy projectiles, and lightning isn't good for people standing in a field holding little metal tubes. If shooting after a storm, wait at least 30 minutes after you last hear thunder and assess the slipperiness of the range before starting.
- **High winds** can also make outdoor archery unsafe. Safety nets can come down, archers can't hear range commands, and arrows can be swept outside of our safety margins.
- As Range Captain **your power to keep the range safe is absolute**. If you're challenged by anyone (like someone with a camera – the most dangerous person on the range!) to bend rules, look the other way, or allow it 'just this one time/' for the pictures" show them this card and say **Absolutely Not**. If they are insistent, you will need to shut the range down until they leave. Better to tick one person off by being safe than have an accident on your hands.

Outdoor Archery Range - Essential Safety Briefing

You must do this briefing with everyone you bring to the range, no matter how experienced they are and whether they are shooting or just watching.

You can do this while your co-counsellors are getting equipment out. They should absolutely not fire or even nock any arrows until you're ready to demonstrate – after all, you'd need to authorise that as Range Captain and you'll be busy elsewhere!

1. **Range Captain is boss.** You are in charge of, and responsible for, the safety of **everyone** present once they enter the archery range. Your power over safety on the range is absolute and you should always err on the side of caution. If in doubt, shut it down.
2. **Zero tolerance** for fooling around/horseplay/'it was just a joke'. Anyone who doesn't take safety seriously **will** be removed from the range. At your and your camp director's discretion, they might be allowed to participate in future sessions – or they might not. **Arrows don't give second chances; you don't have to either.**
3. **Nothing happens until the Range Captain says so.** This means everyone must:
 - stay behind the wait line until invited forward
 - not touch any equipment until instructed
 - not touch arrows or shoot until the range is formally opened by the Range Captain
4. **Range Closed means EVERYTHING stops.** It can be called by anyone who thinks something is unsafe. It's the *only* command that anyone can call.
Everything stops means:
 - no more arrows are fired
 - drawn arrows are let down and returned to the quiver
 - archers step back from the firing line
 - everyone freezes where they are until the Range Captain understands what the hazard is.

It's important that everyone shooting feels empowered to close the range, whether it's because they spotted a bunny or because they see someone pointing their bow at another person.

Get everyone to practice shouting RANGE CLOSED in their loudest voices before anyone touches the bows.

Only proceed to shooting once you've done the safety briefing on the other side with **everyone**.

The points in the box below must be covered with **every person intending to shoot before they lay hands on a bow**.

Then review the archery shooting sequence and how each step fits with the range commands, using your co-counsellor(s) to demonstrate. This will be more or less detailed depending on how experienced the archers are. Your co-counsellor(s) might want to lead the demonstration and that's great! Make sure you're all modelling excellent range practices by using the formal range commands even if it feels a bit silly with just one or two archers. Youth will imitate exactly what they see from you and just one or two arrows can still do a lot of damage.

When you are ready for everyone to shoot, **your entire focus is on keeping things safe**. Below are some key things to look out for.

Archers to the line: Only call this once you have the group's attention. Watch as they come to the firing line. Are they running and jostling or being calm? Does anyone try to grab the arrows the second they get to the line? Close the range and send everyone back behind the wait line to try again if you have any doubts about their safety.

Range is now open: Before you call this, everyone must be in position. Archers calmly straddling the firing line with a bow in hand; coaches behind the firing line; you straddling or behind the firing line; observers behind the wait line; and the range clear of hazards. You should have archers' full attention before you open the range, with no chatting, dancing/shuffling or other distractions. Just standing silently is a really effective way to get everyone settled as they gradually realise nothing is happening. Coaches can also help remind excited archers what's expected.

Position yourself either straddling the firing line or just behind it so you can see all of the archers clearly. You don't need to see the targets, just the range generally and the archers' behaviour. Archers should step back from the firing line once they have fired all their arrows and replace their bow on the rack.

If you are short of coaches and need to help, first close the range and ensure everyone is safe (arrows in quivers, bows on racks except for the person you're coaching) before you step away from the line as Range Captain.

Range Closed: Shooting should stop immediately. Any arrows already nocked must be let down and returned to the quivers, then archers' step back from the firing line and rack their bows. Everyone else should stay where they are. Don't allow any other actions, like retrieving arrows, until you're confident everyone has made themselves safe.

Outdoor Archery Range - Shooting Safety Briefing

- Always **walk, don't run** everywhere in the archery range.
- **Nothing is touched** until archers are instructed to by the Range Captain.
- **Never dry fire a bow**. It's bad for the bow and the archer; the stored energy needs to go somewhere.
- **Arrows are only ever pointed at the ground or at the assigned target**. Anywhere else is horseplay and the zero-tolerance rule applies. Arrows don't give second chances, neither should you.
- When the range is open, an archer should **never pick up an arrow that has fallen** on the ground no matter how close it is. **A dropped arrow is a shot arrow**. Coaches can pick up arrows that fall *behind* the firing line.
- Is everyone planning to shoot wearing **closed toed shoes** and **no loose/dangling clothing, jewellery or hair?**
- **Water bottles, cameras, phones etc. stay behind the wait line**. Anyone is free to step back from the firing line, put their bow on a stand and behind the wait line if they need something urgently. They should then stay behind the wait line until they're invited forwards again by the Range Captain.

RANGE COMMANDS: You may choose to call each step in the archery sequence if your archers are brand new or really young. You likely only need the four commands below for an experienced group.

RANGE CLOSED: Everything stops. Used **any time anyone sees an unsafe situation**.

ARCHERS/ [RELAY 1, 2, 3 etc.] TO THE LINE: Only called by the Range Captain. Archers come forward of the wait line, pick up a bow and straddle the firing line. They **DO NOT pick up or touch arrows** at this point.

RANGE IS NOW OPEN: Only called by the Range Captain once all archers are settled on the firing line, coaches are behind the firing line, spectators are behind the wait line and there are no hazards in the range. Once the range is open archers are free to fire arrows at any time. Once they have fired all their arrows, archers should step back from the firing line and rack their bows.

RETRIEVE ARROWS: Only called once the range is closed and all archers have ceased firing and returned bows to the racks. Remind archers to pick up ground arrows first. Arrows should be held with the points in the hand, feathers towards the sky like a torch.

Archery Shooting Sequence and Range Captain's Commands

Commands in ALL CAPS can only be made by the Range Captain.

Other parts of the shooting sequence can be called by the Range Captain to remind archers but are not essential – judge how much instruction your archers need as they gain experience.

If you have concerns about safety or over enthusiastic archers, restricting them to one step at a time as you call them can help keep things in check.

Archery Shooting Sequence

STEP	WHEN	ACTION	COACHING NOTES
Range Closed	Any time anyone thinks there is a hazard that needs to be dealt with.	All shooting stops and once archers are made safe, everyone freezes. Everyone should stay where they are until the Range Captain understands the hazard and feels happy to proceed.	No more arrows are fired. Drawn arrows are let down and returned to the quiver. Archers step back from the firing line.
ARCHERS [RELAY 1, 2, 3] TO THE LINE	When previous archers have cleared the line and the RC is ready for the next relay.	Archers can come forward of the wait line, picking up a bow on their way toward the firing line.	
Stance	Once each archer has their bow and spectators are behind the wait line.	Archers straddle the firing line, feet hip width apart. Remind left-handed archers to check they're facing their quiver and it's not behind them!	Belly button centered. Weight should be equally over both feet, standing tall and straight. Shoulders are stacked over hips. Side of the archer's body is towards the target, not facing it.
RANGE IS NOW OPEN	Only when all of this is true: - archers are comfortably situated on the firing line - coaches are behind the firing line - spectators are behind the wait line - the range is clear	Archers can start shooting. This is the earliest point at which archers should touch the arrows.	All of the steps between here and retrieving arrows can either be called by the range captain one at a time, to remind archers or keep over-enthusiastic ones in check, or completed by archers at their own pace.

Bow Hand	As archers are preparing to shoot.	<p>The bow hand should be centered comfortably on the handle.</p> <p>This is a loose grip with no squeezing or twisting.</p>	<p>If an archer is struggling with the bow twisting, get them to hold with an open hand, just resting the bow between their thumb and index finger with their fingers outstretched.</p> <p>This can also be helpful if you notice they are holding the bow out in front of them and trying to draw back from there; with no grip, they'll only be able to hold it up with tension on the string.</p>
Load	Once stance looks comfortable and the bow is gripped gently.	<p>Archers take an arrow from the ground quiver and nock it on the string just below the brass nocking point. Ensure the nock is firmly clicked in.</p> <p>Odd fletching toward the archer.</p> <p>Arrow is set on the rest.</p> <p>A dropped arrow is a shot arrow.</p>	<p>Nock should be clipped on the string just below the brass nocking point, with the odd coloured fletching towards the archer's bow arm. This alignment means the fletching doesn't get crushed against the bow as the arrow is loosed.</p> <p>Archers might want to hold the arrow in place on the rest as they nock it, but remind them to remove that finger before they shoot – even soft, fluffy fletching can give you a nasty slice at hundreds of metres per second.</p> <p>No archer should attempt to retrieve an arrow that's been dropped until the range is closed and archers have been instructed to retrieve their arrows. The exception is where an arrow has been dropped <i>behind</i> the firing line and a coach feels they can retrieve it safely. What we don't want is people bending over, leaning, reaching and potentially falling over into the open range or into another archer.</p>

String Hand	After arrows are nocked but before the draw	<p>No more than 3 fingers on the string (pointer above the arrow, middle and ring fingers below).</p> <p>Not gripping the arrow, placed around it.</p> <p>No thumb or little finger – it looks like a Scout sign.</p> <p>String should be held with just the tips of the fingers.</p> <p>Arrow and bow are still pointed downwards and towards the target at this point.</p>	<p>If the arrow is coming off the rest because the archer is pinching it, have them move all their fingers to below the arrow, or try taking their ring finger off. They could also use a finger tab with a spacer block in it, but that doesn't actually train them out of pinching.</p>
Draw	Arrow is nocked, bow hand is still relaxed, string hand is situated and the arrow isn't wandering from too tight a grip.	<p>In one movement, push the bow away as you pull the string to your chin.</p> <p>This is a push/pull movement starting with both arms bent at the elbows, not a pull back from a locked arm.</p> <p>Never lock the bow arm. Instead rotate the elbow out or it's a world of pain when you get clipped by the string.</p> <p>Check that shoulders are stacked over hips and archers are looking with their heads only, not their bodies.</p> <p>Think of drawing the shoulder blades together like you're trying to pinch a pencil between them to activate the right muscles.</p>	<p>Someone with a locked bow arm is probably also hunching that shoulder up and forward; getting them to relax the shoulder down and back will force the bow arm to rotate outwards. There's also a good chance a locked bow arm is clenching the grip pretty tightly; just asking them to open their grip hand will force the arm to rotate outward a bit.</p> <p>If an archer is holding the bow out in front of them, then trying to draw straight back from there with just their string arm, get them to open their bow hand and just rest the grip between their thumb and index finger. Without their fingers to grip the bow, they will only be able to hold onto it with tension on the string. Make sure they are starting the draw with the arrow pointed at the ground and their bow hand open; this helps them to complete the draw dynamically.</p>

Anchor	Bow has been drawn and archer has stopped movement.	<p>String should touch centre of chin, lips and possibly nose (depends how big a nose it is!).</p> <p>String hand will be touching the side of the face.</p> <p>String is in front of the sighting eye and lined up with the body of the bow.</p> <p>String arm is pulling back in line with the arrow – watch out for ‘chicken wing’ elbows aimed at the sky.</p> <p>One of the most common issues is shoulders hunched up around ears; generic advice is ‘shoulders away from ears and pulled back’. Archers can practice this while they are waiting to shoot!</p>	<p>Called ‘anchor’ because this should be a holding position where everything settles in place. An anchor should feel the same every time.</p> <p>The string is drawn to the side of the chest, not the centre. If the string is in the middle of the body, the archer has rotated their chest toward the target and needs to keep shoulders aligned with their hips, perpendicular to the firing line.</p> <p>Touching the side of the face with the string hand gives a firm marker of where they draw to every time. It’s really hard to keep track of where your body is in space without any touch feedback – ask a dancer about how much training that takes!</p>
Aim		Don’t worry about it. Seriously.	<p>People will be really excited about aiming but that can only come after they have solid form and can put arrows in the same place every time. It doesn’t matter where that place is, just that it’s consistent.</p> <p>Once they are placing arrows consistently, they can start to aim. Try out one change at a time and see what happens. Ask archers to observe where the tip of the arrow points compared to where it actually hits, and adjust from there.</p>

Release	Once firm anchor is set.	<p>Take a gentle breath and hold it.</p> <p>As you exhale, move your fingertips just enough to release the string.</p>	<p>A great static release is undetectable except for the arrow whooshing away and the string vibrating.</p> <p>Imagine leaning forwards into your bow arm without actually moving a muscle.</p> <p>Asking youth to be really stealthy and 'sneak' the release in can help reinforce how subtle the movement is. Be cautious they don't hear this as permission to disobey the range captain though!</p>
Follow through	After arrow has been loosed.	Nothing moves except fingertips, the string and the arrow.	<p>Like a statue.</p> <p>Ask archers to hold position for one deep breath after firing to help develop good follow through. Humans have a tendency to anticipate the next movement and start it before we've even loosed the arrow, which messes up the shot!</p>
Relax	Once arrow has hit the target.	<p>Relax, you've done it 😊</p> <p>Get ready to do it again. If you have shot all your arrows, move back from the firing line and replace your bow in the stand while you wait for the command to retrieve your arrows.</p>	Take a moment, a deep cleansing breath before picking up the next arrow. To be consistent each arrow must be shot like it's the first and only one.

Release	Once firm anchor is set.	<p>Take a gentle breath and hold it.</p> <p>As you exhale, move your fingertips just enough to release the string.</p>	<p>A great static release is undetectable except for the arrow whooshing away and the string vibrating.</p> <p>Imagine leaning forwards into your bow arm without actually moving a muscle.</p> <p>Asking little kids to be really stealthy and 'sneak' the release in can help reinforce how subtle the movement is. Be cautious they don't hear this as permission to disobey the range captain though!</p>
Follow through	After arrow has been loosed.	Nothing moves except fingertips, the string and the arrow.	<p>Like a statue.</p> <p>Ask archers to hold position for one deep breath after firing to help develop good follow through. Humans have a tendency to anticipate the next movement and start it before we've even loosed the arrow, which messes up the shot!</p>
Complete	Once arrow has hit the target.	<p>Relax, you've done it 😊</p> <p>Get ready to do it again. If you have shot all your arrows, move back from the firing line and replace your bow in the stand while you wait for the command to retrieve your arrows.</p>	
RETRIEVE ARROWS	Only after range is closed.	<p>Archers walk downrange, checking for arrows in the ground as they go.</p> <p>Stand to the side when pulling arrows, not directly behind your arrow. Check for people behind you when pulling.</p> <p>Start from the outside of a target butt and work your way inwards so you're not leaning over someone else's arrows.</p> <p>When returning to the firing line, hold the arrows like a torch – fletching up towards the sky, points down and in your hand.</p> <p>If you have lost an arrow, don't run off into the bushes – alert the range captain and get their instructions.</p>	<p>Ground arrows can cause your feet and shins a lot of damage, so definitely pay close attention when you're walking out.</p> <p>Holding the points in your hand ensures that if you trip and fall, you're not going to accidentally stab yourself (very much).</p>

Camp Samac Outdoor Range Set Up

Range Captain is ultimately responsible for safe set-up, range safety and safe take-down including ensuring all equipment is locked away.

Equipment set-up can take place while the RC is giving participants the safety briefing, but under no circumstances should any arrows be nocked or fired until the RC has officially opened the range!

Before you start

1. Check the backstop netting. It should run all the way behind the target butts with no big gaps in between pieces and no noticeable holes in the netting. If there are issues with the netting that you can't easily fix (like just pulling it tight again or adding a zip tie between pieces), unfortunately it isn't safe to shoot. You should report this to Camp Samac staff immediately.
2. Decide how many relays you'll run. Up to 4 archers at a time can shoot at the same target butt. So, if you have 12 campers, you'll run 2 relays of 6 campers each at the near target butts. Only set out as many bows, arrows and ground quivers as your need for **one** relay. This prevents fooling around behind the scenes and keeps everyone safer. Everyone can have their own arm guard and finger tab for the duration of the session – they can't get up too much mischief with the safety equipment!

Setup Checklist

1. Open the equipment trailer using the key provided.
2. Use the range diagram for the equipment layout. Do not let anyone except counsellors/coaches/Range Captain touch equipment until they've had the safety briefing.
 - a. **BOWS:** As you remove bows, check for visible damage to the bow or the string like cracking or fraying. If in doubt, put a note on it and set it aside for repair by the Samac Range Committee. You'll need to string the bows as you set them out. The steps to this are at the end as a reminder.
 - b. **BOW STANDS:** Placed midway between the Wait Line and the Firing Line. One stand per 4 bows.
 - c. **GROUND QUIVERS:** One per archer per relay, evenly spaced on the firing line. Do not skip these and have archers jam arrows into the ground; this damages arrows and makes them unsafe.
 - d. **ARROWS:** A traditional end is 6 arrows per archer. You might want to give archers fewer arrows at a time to cycle relays through faster and avoid bored kids. It's also easier to keep track of fewer arrows! Experienced archers will hit the targets more reliably and take less time shooting overall.

Check arrows for safety as you put them out by checking each one has:

- i. 3 feathers
- ii. a nock to clip onto the string
- iii. a metal point (the nose might be squished, this is ok)
- iv. undamaged shaft you think it's not ok, set it aside for repair.

There are **two sizes of arrows**. Unless your archers are all very small (>5ft tall), use the longer arrows for everyone. It's better to have slightly too long than too short. **Do not mix the sizes** of arrows.

Put each archer's arrows directly into the ground quivers, points down.

- e. **ARM GUARDS:** One per archer. They should sit flat on the bow hand forearm when the hand is turned up to the sky. Seat arm guards as close to the elbow as possible, larger end of the arm guard towards the elbow. Tuck in any loose straps. They can be worn over shirts or sweaters and in fact it's safer to wear it over long sleeves than to try and roll them up and risk catching a string on a bunched sleeve.
- f. **FINGER TABS/GLOVES:** One per archer. Not essential but prevents sore fingertips.

Take-down Checklist

Don't be shy about getting your archers to participate in the take-down. One person can be in charge of arm guards, another finger tabs, a third the ground quivers etc. They can all check the equipment they've been using for damage and be responsible for telling you as they return it.

Do ensure only people who've had some training try to unstring bows – there is a lot of potential for injury.

1. Open the equipment trailer.
2. Return the equipment where it came from. A suggested order is below:
 - a. **BOW STANDS:** Placed in the equipment trailer, open so bows can be laid on them.
 - b. **BOWS:** You'll need to unstring the bows before storing. The steps to this are at the end of the checklist.
 - c. **GROUND QUIVERS:** Count them out and in – they won't do a mower any favours if we miss one!
 - d. **ARROWS:** Count them out, count them in.
Get your archers to check arrows over for any damage as they replace them in the arrow box.
 - e. **ARM GUARDS:** Super easy to forget – count them out, count them in.
 - f. **FINGER TABS/GLOVES:** Again, super easy to forget – count them out, count them in.

The Range Captain is ultimately responsible for safe closure of the range and **locking the equipment trailer**. Make sure they take off their high vis and leave it behind!

Before you leave the range:

- Final sweep of the range area for water bottles, ground quivers, any other equipment
- Are the back doors of the trailer latched and locked?
- Is the side door of the trailer locked?
- Has the key been stored or handed back in?

How to string a recurve bow

Why do we string and unstring bows every session? Storing them strung puts a lot of strain on the string and the material of the bows. They lose their springiness and become more prone to breaking, which can be painful for the person trying to shoot and the organisation buying replacements. It's worth the few minutes' effort to keep equipment in good, safe condition!

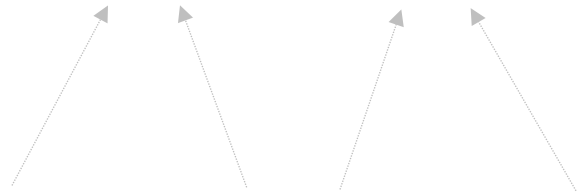
These instructions should work for right- or left-handed people of most abilities, but if you find it easier to swap sides that's absolutely fine.

Unstringing a bow follows the exact same steps with only a couple of alterations, noted below.

- 1) Hold the bow right side up. The arrow rest on recurves is on top of the grip – if that's facing up, you are holding it right side up. Check that the bottom string loop is in the grooves and the top string loop is loose over the body of the bow.
- 2) Place the bottom of the bow across your right ankle and the grip of the bow behind your left knee, with the string in front of your left leg – you will have to step through the bow to get into this position (assuming the bow was unstrung correctly, with the top loop let down the limb and not taken off the top. The person in the diagram is dealing with a loose string and doesn't look thrilled about it!)
- 3) Hold the top of the bow in the vee between the thumb and forefinger of your left hand, then push away from your body to bend the bow into a gentle arc.
 - u. Unstringing: You'll need to bend the bow a little bit further than it already is to create enough slack to pop the string out.
- 4) Find the top loop of the string with your right hand. It should slip easily into the grooves once you have bent the bow enough. Ta-dah, you've strung a bow.
 - u. Unstringing: at this point you gently pull the top loop *out* of the grooves and down the limb of the bow (NOT OFF THE TOP) then carefully release the pressure with your left hand. Make sure this action is controlled or you will end up damaging the equipment and yourself.
- 5) Carefully step out of the strung bow. Check the string is securely seated in the grooves at both ends. The brass nocking point on the string should be almost level with the arrow rest. If it is below the grip, the string is upside down and must be removed, then reversed.



Far target butts
(Use these with more experienced archers)



Equipment
Trailer