

## Ratpack Field Archers

## Beginner Guide to Field Archery

Welcome to Ratpack Field Archers and the wonderful sport of NFAS Field Archery!

## About field archery

Field archery migrated to Europe from the USA over 50 years ago where pseudo hunting using foam targets in a woodland environment gained wide popularity as a means to provide archers with practice outside of the hunting season.

Field archery has now become a sport in its own right and there are now several organisations and many field archery clubs across the UK and Europe.

Field archery is predominately set in woodland with up to 40 targets placed to challenge the archer with targets that are partially concealed, up/down hill or just far away!

Please note that hunting with bows is illegal in the UK.
Field archery targets are designed for the American archery hunting market and accurately depict the animals they hunt. If you are uncomfortable shooting at images of animals, field archery may not be for you.


## Ratpack Field Archers

## How to find us

Ratpack Field Archers are based in 30 acres of ancient woodland at Binstead near Arundel. Parking is limited (and rustic) so please car-share if you are in a group. You will be met at the layby.

What3words:
Hazel.grant.remaking


## Preparation for



## Ratpack Field Archers

field archery
You will be shooting in a woodland environment. It is important you dress accordingly. We share the woodland with deer and other animals so there are also ticks.

We recommend:

- Hiking boots.
- Full length trousers/jeans
- Multiple layers of close-fitting clothing.
- Insect repellent
- Food and drink (no alcohol)

We require:

- Long hair must be tied back/up.
- No open-toed footwear is worn (you will not be allowed to shoot).
- Any piercing (head to naval) removed.

BACS payment made to:

- Account: Ratpack Field Archers
- Sort code: 60-13-18
- Account: 44571860
- Reference: Your surname


## Adult, child and consent form

 Ratpack Field Archersguardian

All information recorded on the following form will be held in strict confidence. This information is vital to allow our coaches to train you safely and a requirement for the insurance that covers the course.

We will be unable to proceed with your course without this information

## Declaration

I will inform the coaches of any important changes to my health, medication or needs and also of any changes to our address or phone numbers given. In the event of illness. I give permission for medical treatment to be administered where considered necessary by a nominated First Aider, or by suitably qualified medical practitioners. If next of kin cannot be contacted and I should require emergency hospital treatment, I authorise a qualified medical practitioner to provide emergency treatment or medication.

The NFAS is committed to ensuring that any information gathered in relation to our coaching meets the specific responsibilities as set out in the Data Protection Act 1998. The club/organisation will store the above information on their base for a maximum of 12 months before re-registering myself if still associated with the club.

Please return the completed form to the relevant Coach


## Ratpack Field Archers

## Adult, child and guardian consent form



I confirm that all details are correct to the best of my knowledge and I am able to give my consent to participate in \& travel to all activities.*

Signature (adult/guardian) $\qquad$
Print Name
Date $\qquad$


## Ratpack Field Archers

## Becoming a full member of NFAS

The NFAS requires that all full membership applicants are fully assessed and signedoff by a qualified NFAS coach. This is to comply with the terms and conditions of the NFAS insurance that covers its members.

The NFAS pre-defines the key points an applicant must be trained in. This in turn dictates the duration of the induction course and much of its format.

The sign-off process is required to ensure all applicants have been trained in, and understand, all aspects relating to safety, competence and behaviour covered in the induction course as defined by the NFAS.

The applicant is required to confirm they understand the training they have received by jointly signing the sign-off form with the coach. Copies of this form are retained by the coach, club and applicant. The original is required by the NFAS as part of the full membership application and may be used for reference in the event of an incident requiring the attention of the NFAS and/or insurance.

Signing-off is mandatory for any applicant who is not an existing NFAS full member or whose membership has lapsed for 2 or more years.

Applicants with archery experience may request attending only the sign-off assessment day. This will be at the discretion of the club/coach and will not reduce the course fee. This will realistically only apply to applicants with previous field archery experience.

Applicants whose experience is solely with target archery are recommended to attend the full course as a large percentage of the training relates to the environment in which NFAS clubs shoot.

If the coach decides an applicant requires further training before being signed-off, supervised practice at the club under a provisional NFAS membership will be required until the coach is satisfied the applicant is ready for sign-off.


## Ratpack Field Archers

## Induction Course

Ratpack Field Archers run an induction course over 2 days of $4-6$ hours per day.

## Induction day 1.

Day 1 will cover the fundamental understanding of the equipment and safe shot process. Applicants will be assessed for safe attire, eye dominance and assigned equipment suitable for their age and physical ability.

Applicants will be trained at the practice butts until they demonstrate they have a good command of the safe shot process and understanding of the safety protocols.

Once the coach is satisfied the applicants have demonstrated an understanding of the training the remainder of the day will be devoted to an introduction to shooting in a woodland environment.

The induction course is designed to ensure applicants are safe, competent and understand the protocols that must be observed. The coach will not be assessing how successfully an applicant shoots. All shots will be relatively short distance so as to be achievable by all applicants in the group.

## Induction day 2.

Day 2 will progress applicants to more advanced shots: uphill, downhill and shots that require gap aiming.

Reinforcement of the lessons from day 1 will be ongoing.
Applicants will be introduced to scoring ("big game") and the rules, regulations and protocols that accompany it.

The coach will then review each applicant's assessment.


## Ratpack Field Archers

## BOWS

## IMPORTANT:

Archery uses muscles that aren't commonly used and it takes time and lots of practice to build these muscles to the point where the archer can consider a heavier draw weight bow.

The "draw weight" refers to the amount of weight held by the fingers when the bow is at full draw.

Bows are rated at an industry standard $28^{\prime \prime}$ draw length, but if your draw length is greater or less than 28 " the "weight at the fingers" will vary accordingly. For every inch variance you adjust the rating by 2 lbs . So if the archer has a 30" draw length a bow rated at 30 lbs means the archer will be holding 34 lbs at the fingers.

It is vitally important that newcomers to archery resist buying (or upgrading to) a bow that is too heavy-a draw weight. Doing so can cause serious damage to the shoulders. Discuss this with a coach before committing.

Thankfully, archery pro shops are very conscientious and will make recommendations based on your experience and physique. It is vital you seek professional advice for at least your first couple of bows.

Bows have evolved over the millennia but to this day many chose to shoot bow styles that have remained pretty much unchanged from their original concept. The following is a guide to some of the many popular styles field archers are tempted by. Beginners are advised to start with a takedown recurve bow (as explained later).

We will start with the most basic and follow the evolution of styles.


## Ratpack Field Archers

## English Longbow



The quintatesimal bow made famous by historical battles such as Agincourt.

The purist's English Longbow is made from a single piece of wood and shoots wooden arrows with hand-carved nocks. These bows are designed to be drawn and the arrow loosed in a single swift, smooth action so as to not over stress the bow.

More modern longbows are made from a combination of laminated woods that make the bow faster and more robust.
Such bows can be held at full draw for longer with less risk of stress damage.
Longbows are relatively slow and can be awkward to use if there are overhanging branches. You can only use wooden arrows with feather fletching at an open shoot.

You cannot upgrade single piece bows so if you want a more powerful bow you will have to buy another bow.

However, the sense of achievement when hitting a target is proportionally high in comparison to most other bow styles!

Longbows are classified as either "Primitive" (if of non-laminated construction and using self-nock arrows) or "Longbow".

## Ratpack Field Archers

## Horse bow

The horse bow refers to its history of shooting
 from horseback (nothing more sinister!).

They originate from 13th century Asia, made famous by the Mongolian horseback archers

The style is far more ornate than that of the longbow but is similar in that it requires the arrow to be sat on the knuckle rather than a shelf or rest.

Horse bow limbs are frequently made of composite materials including fibreglass and even carbon fibre. This, coupled with the "recurve" design of the limbs, make for a far faster and more robust bow than the longbow.

These bows can be a great entry level option. They are comparatively inexpensive, compact and light to hold. Similar to the longbow, shooting off the knuckle can be hard to master though.

Being one-piece they cannot be upgraded.
When used at open shoots these bows are classed as "Hunting tackle" style when shot with wooden arrows or "Traditional Bowhunter" with non-wooden arrows.

## Ratpack Field Archers

## American Flatbow



The American flatbow introduces us to our first bow with an arrow rest. This bow has a cutout in the bow handle for the arrow to sit on rather than the archer's knuckle. The advantage is two-fold: The arrow sits in exactly the same place each time and the cutout aligns the arrow more closely to the centreline of the bow.

These bows tend to be more expensive than the previous bows mentioned but the picture illustrates the amount of work that goes into fashioning these one-piece bows.

When shot with wooden arrows, they have a category, AFB, in their own right. Using non-wooden arrows changes this category to "Traditional Bowhunter".

American flatbows are faster than longbows and more accurate through their design and mix of materials used in their construction. They are arguably more aesthetically pleasing but be prepared to pay for it!

These bows are one-piece and cannot be upgraded.


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## Recurve bow



The takedown recurve bow is the beginner bow of choice and the bow you will be trained on during a beginner or introduction course.

Unlike the previous bows, these bows come to pieces!
The top and bottom limbs bolt to the bow handle (riser) and have the huge advantage of being upgradable at a relatively low cost.

Recurve bows can fit into a number of categories:

- With no sights or stabilisers and non-wooden arrows - "Traditional Bowhunter"
- With no sights or stabilisers and wooden arrows - "Hunting Tackle"
- With no sights, one stabiliser and any arrow style - "Barebow"
- With sights, stabilisers and any arrow style - "Unlimited"

Due to their popularity, entry level bows are excellent value and provide a huge scope for upgrading and style change.

Beginners will already be familiar with these bows so there will be little transition to cope with.

There are also one-piece recurve bows which have the speed advantage over a comparative weight flatbow/longbow but cannot be upgraded.


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## Compound bow



The compound bow represents the most modern and high-tech evolution of archery. It was designed exclusively for the American hunting market in response to the demand for a more compact and powerful bow.

The bow uses geared cam wheels to generate a very high velocity release of 300 feet per second or more. This means the trajectory of the arrow is very flat and therefore requires very little adjustment for distance.

Most compound archers use a mechanical release aid which is far less prone to release errors in comparison to conventional bow styles. Compound bows are also allowed a magnified scope sight making them the most accurate bow available.

The other advantage is that the cams mean that once past the nose of the cam lobe the archer is holding significantly less weight at full draw. This means the archer can take far more time to compose and control their shot with little effort.

Because of its ease of use, the compound bow is favoured by those unable to draw a heavier weight bow to gain more speed or distance.

Due to their technology, compound bows are classified as "Unlimited" although there are variations that can place them in an alternate category.


## Ratpack Field Archers

## Crossbow



The crossbow is one of the more uncommon bow styles as it is so far removed from other archery styles.

Not all clubs allow crossbows as the bolts they shoot can be very high speed and (depending on the point) damaging to foam targets.

Crossbows have more in common with rifles than other bow styles but have the advantage of being relatively easy and accurate to shoot. Like compound bows, the crossbow appeals to those who would otherwise struggle to draw a conventional bow.

The less traditional archer also has the option of a compound crossbow! These bows combine the speed and accuracy of a compound bow with the crossbow's ease of use.

The nearest thing archery has to a gun!



## Ratpack Field Archers

## Recognised NFAS Bow Styles

The following is the current (as at the date of writing this document) definition of NFAS recognised bow styles and their respective limitations:

| Style | Bow | Arrows | Release | Other |
| :---: | :---: | :---: | :---: | :---: |
| AFB | A one-piece flatbow. | Wood \& feathers. | mediterranean | no sight, stabs, draw check, memo |
| HT | not compound | Wood \& feathers. | mediterranean | no sight, stabs,draw check, memo |
| LB | Wooden LB ("D" or oval section) | Wood \& feathers. | mediterranean | no sight, stabs, draw check, memo |
| PV | Hand bow made using natural materials. | wood \& feathers. No plastic nocks | anything but release aid. Can use thumb ring | no sight, stabs, draw check,memo |
| TB | not compound | Non-wooden arrows \& feathers. | 1 anchor point,index finger on nock be it med, 3 under or thumb ring. No face or string walking | no sight, stabs, draw check, memo |
| BB | not compound | any but wood | 1 anchor point,index finger on nock be it med or 3 under. No face or string walking | no sight,draw check,memo Stab single any length. |
| BH | compound | any but wood | mediterranean | no sight,draw check,memo Stab single max 12" |
| FS | not compound | any | Fingers only no release aids | adjustable sight,stabs \& draw check allowed. No memo |
| CL | compound | any | mediterranean | 5 pin fixed sight allowed, no draw check,memo Stab single any length. |
| UL | any but XB | any but wood | any | adjustable sight,stabs \& draw check allowed. memo or binoculars allowed. |
| XB | crossbows | Non-compound exceed 500 grai retaining | crossbows only. Prod must not be alumini ins. A cocking rope may be used. Full trigg clip are all required. Limitations on telescop | ium alloy. Minimum bolt length is 14 ". Bolt weight must not er guard, manual or automatic safety mechanisms and bolt e sights (please see full rules). Memoranda allowed. |
| TD | A one-piece | any | Thumb loose only | no sight, stabs, draw check, shelf |
| TXB | Traditional crossbow | Wood \& feathers. | ???? | $\text { no sight, bolts } 14^{\prime \prime} \text { to } 16^{\prime \prime} \max 500 \mathrm{gr} \text {, max 200lbs draw }$ weight |
| This is a summary, read the rule book for full details |  |  |  |  |



## Ratpack Field Archers

## Calculating Bow Weight




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The rated draw weights of the ILF limbs are measured when used with the $25^{\prime \prime}$ risers.

When used with a shorter riser, the draw weight will be higher.

Use this table to find out which draw weight option you actually need for your setup.

| Rated Draw Weight ( lbs ) <br> Riser Size (in ) | 20 | 25 | 30 | 35 | 40 | 45 | 50 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 17 | 24 | 30 | 37 | 43 | 48 | 53 | 60 |
| 19 | 23 | 28.5 | 35 | 40.5 | 46 | 51 | 57 |
| 21 | 22 | 27 | 33 | 38 | 43.5 | 48.5 | 54 |
| 25 | 20 | 25 | 30 | 35 | 40 | 45 | 50 |

## HOW TO USE:

If you need a 35 lbs bow with a 19-inch riser:

1. Look at the 19 -inch line
2. Find 35 lbs
3. Check the first line for the rated draw weight you should purchase

You should choose the 30 lbs option to build a 35 lbs bow with the 19 -inch riser in this example.


## Arrow types



## Ratpack Field Archers

Arrows come in 3 basic classes:

- Wood. Usually made from cedar, pine or bamboo. Can be shot from all bow styles except compounds and crossbows. Can be shot from all bows except crossbows
- Metal. Made from tubular aluminium
- Carbon fibre. Either all carbon, carbon around aluminium or FMJ (full metal jacket) which are carbons in an aluminium sleeve. Can be shot from all bows except crossbows. Crossbows use bolts which are normally aluminium arrows of about $14^{\prime \prime}$ in length with an extra heavy pile.

Some grounds or tournaments only allow wooden arrows to be shot.
Most clubs allow wooden and metal (aluminium) arrows to be shot there.
Some grounds ban all-carbon arrows as they are extremely sharp if broken and may present a risk to livestock or public if not recovered.

Some grounds allow all types of arrow to be shot there.
Arrow points vary but no Field archery club allows blunts or broadheads.
Mixing arrow classes with a given bow style will likely change your shooting class if you shoot the arrows not allowed by that class. (see bow styles).

An arrow is fletched with feathers (from birds) or vanes (plastic). This can also affect the class you shoot in.

We allow archers to shoot any bow with any arrow with any fletch using any loose at Ratpack as long as rules $\mathbf{1}$ to $\mathbf{4}$ above are followed.


## Ratpack Field Archers

## Understanding

## Arrow Tuning

The following guide is for the more experienced archer but is also a good education for beginners! The centre square explains the chart.

| Nocking point too low. Move nocking point up. <br> RH Arrow too stiff. RH Increase pile weight. <br> LH Arrow too weak. <br> LH Decrease pile weight. <br> Move sight up. Move sight pin left. <br> Move rest/button right. | Nocking point too low. Move nocking point up. <br> Move sight upSight pin correct. <br> Rest \& button correct. | Nocking point too lowMove nocking point up. <br> RH Arrow too weak. RH Decrease pile weight. <br> LH Arrow too stiff. <br> LH Increase pile weight. <br> Move sight upMove sight pin right. <br> Move rest/button left. |
| :---: | :---: | :---: |
| Nocking point correct. <br> RH Arrow too stiff. RH Increase pile weight. <br> LH Arrow too weak. LH Decrease pile weight. <br> Sight correct. <br> Move sight pin left. <br> Move rest/button right. | This chart is for right and left hand recurves. <br> Bare shaft \& nocking point tests. <br> This area is where your fletched arrows need to go. The other areas are for bare shaft arrows. <br> Sight terst, all areas fletched arrows. All good if they are here. <br> Rest Be button test, all areas fletched arrows. All good if they are here. | Nocking point correct. <br> RH Arrow too weak. RH Decrease pile weight. <br> LH Arrown too stiff. LH Increase pile weight. <br> Sight correct. Move sight pin right. <br> Move rest/button left. |
| Nocking point too high. Move nocking point down. <br> RH Arrow too stiff. RH Increase pile weight. <br> LH Arrow too weak. LH Decrease pile weight. <br> Move sight down. Move sight pin left. <br> Move rest/button right. | Nocking point too high. Move nocking point down. <br> Move sight down. Sight pin correct. <br> Rest \& button correct. | Nocking point too high. Move nocking point down. <br> RH Arrow too weak. RH Decrease pile weight. <br> LH Arrown too stiff. ㄴH Increase pile weight. <br> Move sight down. Move sight pin right. <br> Move rest/button left. |



## Ratpack Field Archers

## Before you buy.....

If you shoot outside the club, you will be expected to follow the bow style chart for bow/arrow combinations.

Alternatively, you can choose to shoot Non-Comp (non-competitive). This means your score will not be recognised by the shoot's organisers and you will not be ranked in the results, but you still get to enjoy the course and the company!

Arrows should be matched to the bow you choose to shoot. The matching process is dependent on your draw length, the weight (strength) of your bow. Experienced archers may tune their own arrows but novice archers are strongly recommended to visit their local archery pro shop who will be able to help you find the right arrows for you.

Never buy bows or arrows from an unverified source (Ebay, etc.) . It may be cheap but it's highly likely to be unsuitable for you and be a potential hazard to both you and those you shoot with.

Expensive arrows will not make you a good archer but a straight arrow will help.
Our advice is to buy cheap to reasonably priced arrows to start with as you will break and lose arrows in the infancy of your archery life.

Ken, our chairman, will make a set of wooden arrows to your specification if you so desire. The cost varies by specification required. He is a lot cheaper than the shops.

It is worth gaining an understanding of the (Google) archer's paradox so you can appreciate the terminology when arrows are referred to as being too stiff or too weak.

The following page details our suggested starter pack for beginners.

Ratpack Field Archers

## Suggested Kit

## DO NOT BUY ANYTHING BEFORE YOU HAVE COMPLETED YOUR COURSE!

## USE AN ARCHERY PRO SHOP. THEY WILL ENSURE YOU GET THE RIGHT KIT

- A Bow
- 12 Arrows
- A belt quiver. Back quivers tend to dump their contents on the floor if you try to pick something up. But it is your choice.
- An arrow rake (looking for lost arrows). A radiator paint roller handle is the cheapest and best.
- A multi tool/pliers for getting arrows out of trees.
- Sheath or lock knife with a fixed, thick blade. Survival knives are good as the blade is sturdy and they are relatively cheap.
- An arrow puller to help remove arrows from targets.
- Whistle (mandatory by NFAS rules) for signalling for help or stopping a shoot in an emergency.
- A bow stringer to aid stringing your bow.
- A bow bag. If your bow does not come with one, buy one to protect your bow when not in use.
- Nocking point pliers for fitting and removing brass string nocks.
- Bracing height gauge. Maintain the correct nocking point and bracing height on your bow.

If you wish to make your own wooden arrows you will need all the raw materials, fletching jig and a taper tool. If you want to make your own strings you will need a string making jig which you can buy or make.


## Ratpack Field Archers

## Safety checks

You should ensure both your kit and yourself are in safe condition for archery before shooting.

Perhaps most importantly, you should be aware of any physical discomfort you have in your upper body. Shoulder injuries are very common in archery and can take years to heal if ignored. Equally, your hands, elbows and back have to work hard during archery. If you experience discomfort when shooting don't ignore it. Seek advice from fellow archers or coaches. It could be something wrong with your shot process that needs fixing.

Attire:

- Multiple, close-fitting tops are recommended. You should avoid anything baggy that could impede your shot process
- We share our woods with deer and other wildlife. Ticks are common and can carry Lyme Disease. Full length Jeans or trousers are recommended.
- Footwear should be suitable for uneven and potentially muddy conditions. NFAS insurance does NOT allow open-toed footwear
- Check your hair is tied back/up. If your hair gets tangled in your bowstring it will tear your hair (and scalp) out.
- Piercings between head and navel should be removed. Your bowstring is very capable of removing a piercing by force.
- Loose, dangly jewellery should also be removed for the same reason



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## Bow and arrows:

- Check your bow limbs and riser (handle) for damage and delamination. It is best to use a soft cloth to avoid cuts should there be splinters.
- Check your bowstring and its serving for wear.
- Check your limbs aren't twisted. You can do this by stringing the bow and placing an arrow between the limb and string at the end of each riser. Looking along the string should see the arrow shafts parallel to each other.
- Beginners with takedown recurve bows should check they have the limbs fitted correctly. Usually the bottom limb has manufacturers writing on it. The limbs should curve away from the riser (handle) before being strung! Check the arrow rest (if fitted) isn't damaged. Ensure the bowstring is fitted correctly
- All ancillary equipment should be checked for damage and being correctly fitted.
- Arrows should be checked for damage. This is particularly important for arrows that are prone to splintering i.e. wood and carbon shafts. Undetected cracks can result in the arrow shattering on release potentially harming both the archer and those around them.
- Check for damaged nocks. Do the arrows nock to the string with an audible click?
- Ensure your name (initial and surname as a minimum) is on every arrow. It is vital the club can account for the activity of its members when on club grounds. ANY LOST ARROWS FOUND WITHOUT A NAME WILL BE DESTROYED.



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## Release styles

The following image details the Mediterranean and 3-fingers-under loose methods. Thumb release is detailed on the next page.


## Thumb draw

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Thumb release is slowly gaining in popularity. NFAS now officially recognise it as a bow style. It has evolved from horseback archery and those choosing it frequently honour its heritage by shooting horse bow style. However, NFAS allows other bow styles providing it is a one piece bow with no stabilisers or sights.

## The elusive

Hunting for wayward

## Ratpack Field Archers

## arrow

archery. However, it is important you observe some fundamental rules.

- Always leave one archer in front of the target. If you are all out of sight searching for arrows behind the backstop approaching archers may not see you.
- If you are shooting solo leave your bow in front of the target.
- Non-shooting members of the group should be watching where the shooter's arrows go
- Keep a note of how many arrows you start with before shooting.
- Arrows that fall short frequently end up under the target or backstop.
- Carry an arrow rake. A knife and pliers are also very useful for arrows shot into wood
- Do not use a knife on a target. 3D targets are VERY EXPENSIVE. Treat them with respect.
- Arrows that ricochet off a target, backstop or tree can be very hard to find. If no one has seen the trajectory of the arrow it could be anywhere. Don't spend longer than 3 or 4 minutes searching if you have another group waiting.
- If you're unsuccessful in finding your arrow, note the target number and return later.
- See the "Open Shoot Guide" for etiquette regarding arrows



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## Pulling Arrows

Pulling arrows requires more consideration than might at first be apparent.
Higher poundage bows embed arrows deeper into targets and can make them hard to remove. Some arrows can cost in excess of $£ 30$ each and some have been lovingly hand-crafted to be tailored to an archer and their bow.

- Before pulling any arrows from the first target of a round, check that all archers are happy for you to pull their arrows. Some would rather pull their own.
- Confirm all arrows have been scored (if at an open shoot).
- Check there's no one behind you. Arrow nocks are sharp!
- Brace against the target before pulling.
- Firmly grip the arrow shaft close to the target and pull back inline with the arrow.
- Do not twist or bend the arrow.
- Don't try to hold too many arrows while pulling. Pass them to another group member.
- Never cut a 3D target to extract an arrow. They can cost $£ 1000$ s.
- Use an arrow puller. They make life so much easier.
- If an arrow is too difficult to pull it is not unreasonable to ask the archer to pull their own arrows. Do not risk injury to yourself or others.
- Be aware of arrows having passed through the target and into wood. Consult with the archer before attempting removal if the arrow is stuck.


## Ratpack Field Archers

## Club Shooting

## ALWAYS FOLLOW THE DIRECTION ARROWS. NEVER WALK BACK ON YOURSELF UNLESS YOU ARE IN DIRECT CONTACT WITH THE ARCHERS ON THE PREVIOUS TARGET AND THEY ARE AWARE AND HAVE GIVEN YOU PERMISSION TO DO SO.

Do not flower-pick or damage the woodland environment. We are entrusted to preserve the woodland as a condition of our lease. Equally, much of the flora is protected. Any woodland management must be carried-out under the authorisation of the committee.

How to follow the course correctly:

- Direction arrows will take you from the club HQ to the courses; Red, Blue or Green. Direction arrows are colour coded to each course.
- From one direction arrow you can see the next direction arrow, or a target number or a set of pegs. Each set of pegs is numbered. There are 15 sets of pegs per course.
- At the targets you will see the direction arrow to the next set of pegs. It is usually nearest the furthest target, but it will be near a target. Follow the direction arrows and not necessarily where you walked last time, the course may have changed.

Do not drop litter. This includes broken arrows!
Do not smoke anywhere on the club grounds other than at the designated smoking area at the club HQ.

Take broken carbon arrows home.


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If you see a significant hazard (fallen tree, hanging branch, etc.) contact a member of the committee. DO NOT ATTEMPT TO TACKLE IT YOURSELF.

Be aware of your environment. You are sharing the woodland with deer, rabbits, badgers and other wild animals and insects. New burrows will appear overnight and old ones fill with leaves and become hidden.

Brambles can scratch and pose a trip hazard and stinging nettles.... well... sting.
Ticks accompany the deer and will hitch a ride on your clothing before attaching themselves to you later. Remove any ticks as soon as you find them. If a bite develops a red circle around it consult a doctor as you may need antibiotics.

Shooting a target:
All target areas (1 to 15 on each course) have 3 targets to choose from. You are under no obligation to shoot all 3.

There are 3 pegs: red, white and blue, in descending order of difficulty. There are no firm rules as to which peg you shoot from or at which target. Some targets will be more challenging from different pegs.

Ensure you have a firm, stable footing and your leading (left for right-handed and right for left-handed) knee or foot is touching the back of the peg. The peg must be between you and the target.

Check for people and animals in the target or overshoot area before you nock the arrow.

Exercise common archery sense when selecting the target to shoot. Be confident you will hit either the target or its backstop. Make sure others in your group are watching where your arrows land.


## Ratpack Field Archers

Remember your safety training when collecting arrows. Be aware of short-fallen arrows as you approach the target and pull arrows correctly.

Check your arrows for any damage, especially if they impacted the ground, tree or backstop frame. Segregate damaged arrows at the back of your quiver.

If you move a target or backstop to search for an arrow make sure you put it back in its original position. This is very important as not doing so may affect the overshoot area if either are misplaced.

If a peg is knocked over please right it.
See our guide to open shoots for a better understanding of scoring and etiquette.


## Ratpack Field Archers

## Open Shoots

This section is a guide to attending your first open shoot along with its protocols and etiquette.

If this will be your first open shoot, arrange to shoot in a group with someone you know from the club. The shoot organiser can normally accommodate this providing they have sufficient notice.

There are several local (around an hour's drive) NFAS clubs that hold regular open shoots. Most are well attended by Ratpack archers so keep an eye and ear open. Equally, most clubs advertise their open shoots on the NFAS shoot dates page.

Once booked you just need to turn up on time and bring everything with you.

## Do not forget the following!

- Your NFAS membership card. You will NOT be allowed to shoot without it.
- Bow, bracer, glove/tab and pens
- Arrows:
o They MUST be marked with your initial and surname.
- They MUST be clearly identifiable from ALL angles as 1st, 2nd and 3rd arrow. Tape or painted bands around the shaft are best.
- Bring spares!
- Whistle.
- Money for food/drink.
- Not essential but it's good to support the club hosting the shoot.
- A folding seat (most clubs provide some seating).
- Spares (string, nocking points, etc.).
- Water.
- Insect repellent.



## Ratpack Field Archers

Most open shoots follow the same schedule:

- Registration
- Present yourself and your membership card
- Receive your scorecards and target/group number.
o Fill-in any detail on the cards: name, bow style, club, etc.
- Arrow check (not all clubs at this time)
- A relatively new procedure, but necessary to ensure all archers have arrows properly marked and correct for their registered bow style
- Assembly
o Details of the course with any special instruction
o The shoot start and emergency stop procedure
- Awareness of hazards
- Location of facilities
- Rules on jumping (more on that later)
- The marshalls leading the walk-outs
- Walk-out - Follow the marshall whose target range you are assigned.
- Scorecards
- You have likely been given 2 cards. This is so 2 other archers in your group can record and double-check your score.
o You should NOT score your own card. You will have two or more cards from other archers in your group to score
o Some groups will nominate one person to pull arrows while the others score
- It is customary to check scores every 5 targets
- Many archers don't want to know what their score is until the shoot ends. Respect this and compare scores quietly/silently



## Ratpack Field Archers

- Shooting
- One archer at a time
- 1st arrow from the red peg. If you miss, move to the white peg to shoot the 2 nd arrow. If you miss, move to the blue peg for your final arrow. Make sure you shoot the correctly marked arrow!
- Most groups like a random shoot order that shares the pressure of being the 1st up! This can also benefit others in the group to see where the 1st archer's arrow goes, potentially indicating a deceptively long or short target.
o Ensure you are well behind the shooting archer
- Some archers dislike the group being silent when they are at the shooting peg but equally some need silence! Respect either if an archer requests it.
- Scoring
o Once all archers in your group have shot, approach the target by the route marked.
- Do not alter any undergrowth that affects the shot from the pegs.
- Big game targets have a kill and often a pro-kill zone. The kill zone is a clearly marked oval usually on the animal's side or chest. Within this zone there is usually a smaller circle marked. This is the pro-kill.
- An arrow in a horn or hoof is a miss
- The higher score counts if the arrow touches the outline
- A 1st arrow hit in the pro-kill is 24 (1st arrow only)
- A 1st arrow hit in the kill (but outside the pro-kill) is 20
- A 1st arrow hit outside the kill (but in the animal) is 16
- A 2nd arrow hit ANYWHERE in the kill is 14
- A 2nd arrow hit outside of the kill is 10
- A 3rd arrow hit ANYWHERE in the kill is 8
- A 3nd arrow hit outside of the kill is 4
- 24 s should be highlighted on the scorecard for a tiebreak



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- Pulling arrows:
- You must NOT touch any arrows in the target until all archers have scored.
- Confirm it is OK before starting to pull the arrows
- It is not unreasonable to ask an archer to pull their own arrows if they use a high powered bow
- Check with archers that they are happy for you to pull their arrows at the 1st target. Some would rather pull their own arrows.
- Searching for arrows:
o The nominated scorers in the group should complete scoring before assisting with a search for lost arrows.
- One member of the group must stay at the target.
- Don't search for longer than a couple of minutes.
- Note the target number and report a lost arrow to a marshall.
- Jumping
- It is not uncommon for a slower group to hold up groups behind it. Your group can usually ask whether they can restart shooting ahead of a slower group during the lunch break.
o It is worth noting that this has little effect on the finish time of the shoot as it's only as quick as the slowest group to submit their scores. However, if there are multiple groups being held up, jumping can help the flow of shooting and alleviate frustration!
- You DO need the permission of a group to jump them.
- Finishing the shoot
o Shake hands with the others in the group.
- Move to a safe area or return to the assembly area to verify and total the scores.
- Pair all the scorecards and return them to registration.
o Depending on how quickly you finished your round, you may have a lengthy wait for all scores to be handed-in, verified and



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- Finishing the shoot (continued)
o Clubs frequently hold raffles ahead of the results announcement. This helps raise funds to support the club and buy new targets
o Should you find you have won a medal, it is customary to wait for the other medal winners in your category to congratulate them.
- Applaud the organisers and course layers.




## Ratpack Field Archers

## Other Reading

## Judging Distance

By Jim Sherman - TimberLine Archery
Feb 16, 2008-10:47:29 AM
JUDGING DISTANCE FOR HUNTING: (Edited for UK relevance)
One of the hardest things about bowhunting is judging distance. An arrow has a lot of trajectory and you need to be able to judge distances fairly accurately to hit a target. Judging distance for hunting

The following chart shows how much you would be high or low if you misjudge the distance by 5 yards. For example, you would be 2 " high if you were shooting a 240 F.P.S. bow and you judge 20 yards and the animal was 15 yards. You would be 3" low if the animal was 25 yards and you judged 20 yards.

## DISTANCE JUDGED

AND THE ANIMAL WAS 5 YDS CLOSER
ARROW SPEED 20YDS 30YDS 40YDS 50YDS
240 F.P.S. 2346
260 F.P.S. 2345
280 F.P.S. 1234


## Ratpack Field Archers

## DISTANCE JUDGED

## AND THE ANIMAL WAS 5 YDS FURTHER

ARROW SPEED 20YDS 30YDS 40YDS 50YDS
240 F.P.S. -3-5-6-7
260 F.P.S. -3-4-5-6
280 F.P.S. -2-3-4-5
You can judge the distance 5 yards short out to 40 yards with a 240 F.P.S. bow and still be within an 8 " kill area if you were aiming for the centre of the kill. You don't have quite the same margin for error when the target is further than you guessed. That is because the arrow is going slower at greater distances and dropping faster. An arrow that leaves the bow at 240 F.P.S. is going only 225 F.P.S. at 50 yards. The arrow from a 240 F.P.S. bow would only be within an 8" kill when you guessed 20 yards and it was 25 yards. You would have a wound if you guessed 30 yards and it was 35 yards. You can see it is better to guess long than short.

Most people can guess within 5 yards of distances up to 40 yards, but the accuracy falls a lot faster after 40 yards and that is at the same time you need to be more accurate.

There are several methods that people use for judging distance. The most common is to break down the distance into $\mathbf{1 0}$ or $\mathbf{2 0}$ yard increments. You learn what $\mathbf{1 0}$ or $\mathbf{2 0}$ yards looks like and then keep adding that until you get to the target. Personally I prefer $\mathbf{2 0}$ yard increments for hunting because it is faster with fewer calculations.


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You watch people at 3-D shoots and they guess a distance within a yard and those with moveable sights will set their sight to that distance. Guessing to the yard isn't as important in hunting because you are shooting at an 8"-12" kill compared to the couple inch circle at 3-D shoots.

Some people will just look at a target or animal and just guess the distance because of the size. That can be deceiving because targets and animals come in different sizes. You will see people at 3-D shoots run to the next target to get a view of the group shooting ahead while they are standing at the target. They have figured the size of the people at different distances.

A lot of people use both methods. They first just guess the distance and then follow that up by using increments of $\mathbf{1 0}$ or $\mathbf{2 0}$ yards and see if they come up with the same distance. It is good when you use two methods and they both give you the same distance. It is bad when you get two different distances because then you don't know which one is correct.

You can also use a combination of three methods. You can first look at the target and guess. Then use increment measurements to estimate the distance.

A third method for hunting is the minimum/maximum distance guess. After you have used the first two methods you can guess what the minimum and maximum distance is. Then compare that to your other two guesses. For example, you look at a target or deer and guess it is between 30 and 40 yards. Then you look at 20 yards and double it. You know it is less than 40, but well over 30. You know it is then in the upper 30 yard range. Then to be safe, use a chart like above and figure what the minimum and maximum distance you can shoot and still make a kill.

Here is a method I use for hunting. I like it because it is faster than guessing
an exact with my bow only need to be or minus 4 yards.


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I know that at $30-40$ yards I can hold my 30 yard pin from dead on at 30 to high at almost 40 . At close to 40 I hold the $\mathbf{4 0}$ yard pin low and high when it gets close to 50 yards. I first guess the distance within 5 yards. Then I measure off 20 yard increments.

An example would be I guess a distance to be between 35 and 40 yards. 1 measure $\mathbf{2 0}$ yards increments along the ground and it comes up short of 40 yards. I know I will hit the kill if I put my 30 yard pin high or 40 yard pin low. It doesn't make any difference if the animal is $\mathbf{3 5}$ or $\mathbf{4 0}$ yards. That is much faster and easier than guessing it is 38 yards and then having to hold 3 " low with my 40 yard pin.

You can do the same thing with your bow. The chart above gives you an idea of your trajectory if you know your arrow speed. The chart is an approximation because different fletching and points will affect drop slightly and heavier arrows lose less energy so they have less drop.

You can figure out your arrow trajectory to be more accurate. Sight your bow in accurately for distances like 20, 30, 40, 50 yards or any increment you like. Then start shooting at 20 yards and move back until your arrows are hitting 4 " below the bulls-eye. Then shoot moving ahead of 20 yards until you shoot 4" high.

The difference between those yardages is your kill range for that 20 yard pin. Don't trust your memory. Write it down. Then do the same thing for the rest of your pins. I use an 8 " kill because that is about the minimum, which gives me room for error. You will probably find that you have overlapping kill zones for the closer pins and gaps with the farther pins.


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