

Lviv State University of Physical Culture named after Ivan Boberskyj

Department of shooting and technical sports

Subject

*"Theory and Methodology of the Selected Sport
and Improvement of Sports Skill – archery"
for 4 courses students*

LECTURE:

"SAFETY IN ARCHERY"

by prof. Bogdan Vynogradskyi

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SAFETY

The use of archery equipment could be dangerous, and therefore must be treated with great care. It is very important that everyone teaching people to shoot thinks about safety. This section of the manual will help you to keep everyone safe while teaching them to shoot.

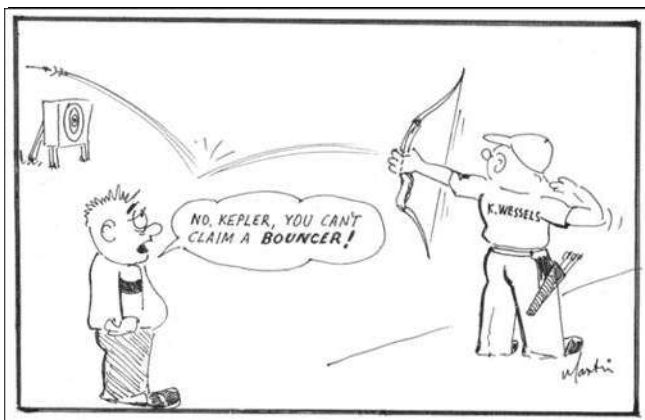
2.1. Planning

2.1.1. Facilities

Before starting each teaching session you should check the area to be used to make sure it is safe for you, for the people you are teaching and any other people who happen to be near you.

If shooting outdoors:

- Check the area to see that no one could walk into the shooting range area, put up "warning" or "keep out" signs, or flags, and if possible, fence off the area;
- Make certain there is plenty of space (at least 30m, ideally 50m) behind the butts for any arrows that miss the target. If this space is not possible, use a high bank behind the butts or put up straw bales or something similar to prevent arrows from flying too far;
- If the ground is very hard put straw, leaves or something similar to protect the arrows and stop them from bouncing too far;



- Make sure the ground has no holes or other hazards that people may fall over and injure themselves;
- Have the target butts firmly fixed into the ground so they do not fall over when the arrows are pulled out;

- Keep all spectators 10 meters behind the shooting line and make sure all young children are supervised by their parents.

If shooting indoors:



- Make certain the doors that people could come through at a level with or in front of the shooting line are closed and have "keep out" signs on the outside. Some of these doors may be emergency exits so keep these clear in case use is required;
- Make sure the butts are firmly fixed to the wall or weighted to the floor so they do not fall over when the arrows are pulled out;
- To prevent damage to the arrows, bouncing back off the wall or damaging the walls, make sure the area above, below and to the sides of the butts are covered;



- If netting is being used to stop arrows, make sure it is properly installed (see chapter 9 Facilities-Equipment)
- Keep all spectators 10 meters behind the shooting line and make sure all young children are supervised.

2.1.2. Emergency action plan:

Although serious injuries or accidents are very rare, you must be ready to deal with them if any such accidents do occur.

If at all possible, have someone at the range that has formal training in first aid and CPR.

Develop an Emergency Action Plan and write it down so everyone knows what they have to do in case of an emergency. Include how to get medical help, any telephone numbers to call, where to find a telephone and the names of the people who are able to carry out first aid while waiting for medical help. Put this important document where it can always be seen, and keep a copy in the First Aid Kit.

2.1.3. First aid:

The basic rule of first aid for a sports injury is **RICE**.

R – Rest.

I - Ice or cold water is used for cooling the injured area and to prevent inflammation.

C - Compression/pressure to reduce the blood flow to the injured area.

E - Elevation/raise the injured part to help prevent swelling.

Every range should have a first aid kit. Talk to your nearest medical centre or nurse to help you put together a proper kit. A simple first aid kit might contain the following:

- Blunt ended or bandage scissors;
- Safety pins in various sizes;
- Bandages - crepe and tubular in various sizes (ask your pharmacy or medical centre);
- Zinc oxide strapping for securing bandages, and strapping joints;
- Gauze swabs, Cotton swabs/Cotton balls;
- Cleansing tissues;
- Self-adhesive strip dressings, Athletic tape/adhesive tape;
- Antiseptic ointment;
- Orthopaedic felt or foam pads (can be cut to shape) - for sore feet;
- Instant cold packs or cold spray (ask your chemist or medical centre);
- Petroleum Jelly;
- Eye patches;
- Insect repellent;
- Towel;
- Latex gloves;
- Plastic bags;
- Access to a communication system for contacting specialized assistance;
- First aid manual

Make sure there is always someone around who can do first aid. Don't have anything in your

first aid kit that the first aider does not know how to use. Remember that first aid is exactly what its name says: FIRST AID - seek medical advice if the injury is anything more than minor.

Make sure EVERYONE knows where the first aid kit is kept.

Do not allow the contents of the first aid kit to be used for anything except first aid.

When you use the kit make sure you replace what is used. Regularly check the items in your kit and remember to restock them before they are used up or when they are out of date.

When using an ice pack, make sure it is not put directly onto the skin or you may cause a cold burn; wrap it in a small towel or cloth before applying it to the affected area. If no ice is available a cloth soaked in cold water could be used.

2.1.4. Archery site

Draw a detailed plan of the site where the archery classes will be held. Indicate emergency phone numbers, where the first aid kit is kept, the route that the medical staff should follow in case of an emergency and all other details that you consider useful such as relevant mobile phone numbers and the names of the people in charge of the archery lessons, location of the nearest hospital.

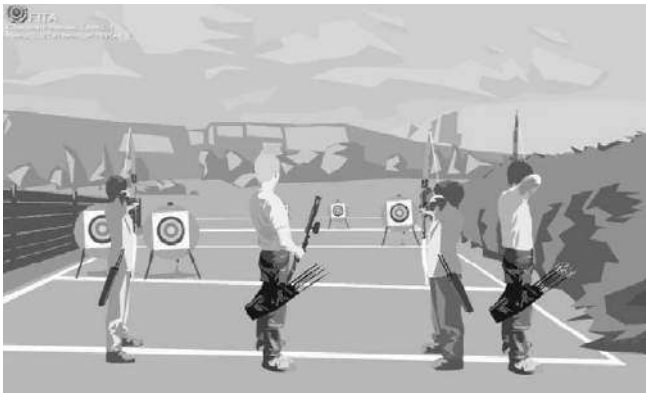
2.2. Group safety

2.2.1. Planning

All shooting must be under the direct supervision of one coach or other identified person whose duty is to control the shooting of the group. He/she signals the start of shooting, the end of shooting and when archers are allowed to go to the target to collect their arrows.

Make sure you have adequate supervision. If at all possible a 1:6 coach to archer ratio is ideal, up to a maximum of 1:12.

The shooting line should be straight, not staggered. If you have archers shooting at different distances, put the targets at the distances being shot and have everyone shoot from the same straight line.



A single shooting line helps make the shooting range safe.

Have a whistle to control the shooting and make sure that everyone can hear it. Make sure you use the same signal each time you want the archers to carry out a particular task, for example 1 whistle to start shooting; 3 whistles to collect the arrows.

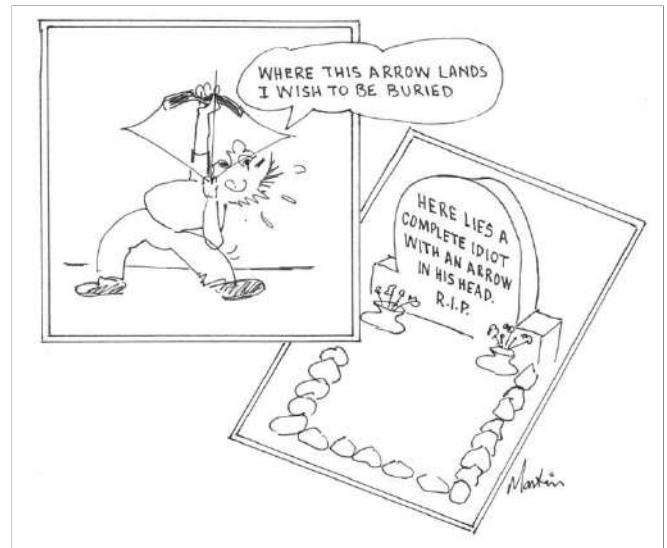


Keep archers as well spaced as possible, no more than 2 people per target is good but definitely do not have more than 3 persons per target shooting at the same time. Keep all of the equipment in good condition, it must be inspected often and repaired as necessary.

2.2.2. The lesson

The first things to tell your beginner group are the safety rules:

- Do not touch equipment until told to so by the instructor;
- Do not put an arrow in the bow until standing on the shooting line and facing the target;
- Do not raise the bow or shoot an arrow until told to (voice command or 1 whistle);
- Never shoot if there is anyone in front of the shooting line (including behind the target);
- Do not raise the bow hand higher than the hand drawing the string;



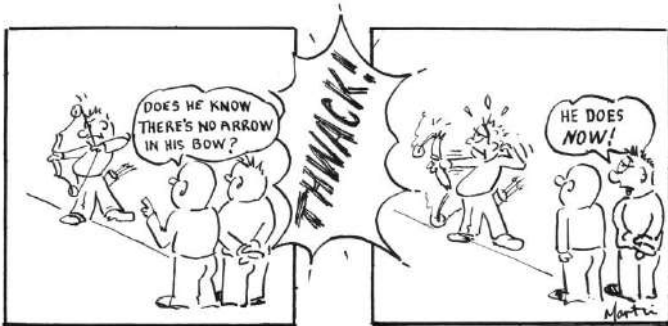
- If an arrow drops in front of the archer it must be left there until after the 3 whistles to collect arrows has been given, never move forward of the shooting line while shooting is still taking place;
- When pulling arrows out of the target be careful that no-one is standing directly in line and could be hit with the nock end of the arrow as it is withdrawn from the target;
- If there are more than 3 blasts of the whistle this means there is some danger, STOP SHOOTING IMMEDIATELY. Take any arrows out of the bow and return them to the quiver until there is a signal to recommence shooting.
- All archers must have one foot on either side of the shooting line or have both feet on the line.
- If people are shooting from a wheelchair there should usually be one large wheel and one small wheel on each side of the line. Make sure the wheelchair brake is on.
- Archers should stand in a direct line with the target they will be shooting on, do not shoot diagonally across the path of arrows of someone shooting next to you.
- Keep the bow vertical when loading the arrow and after shooting the arrow. Do not swing the bow sideways at any time.
- Always take care on the line so you do not disturb other people still shooting.
- When archers have finished shooting all their arrows, they should put their bow against the bow stand and step back behind the waiting line.
- If people are behind the target looking for arrows that have missed, have one member of the group stay in front of the target so that everyone knows shooting cannot start.

2.3. Personal safety

Many archers do not concern themselves enough with their own safety while handling archery equipment.

Let's look at some things that can prevent injury:

- A proper warm up should be the start of each shooting session to prevent muscle damage.
- Flat-soled shoes should be worn on the range to provide a firm foot position that is repeated every time. For competitions, shoes that cover the whole foot must be worn
- Stringing a bow, if done incorrectly, can cause serious injury. Bows should be strung before the first few teaching sessions begin and then the correct way to string a bow should be carefully taught;
- Strings that are too long or too short for the bow are dangerous and must be replaced as well as strings that are fraying; especially if the fraying is around the top or bottom tips of the bow;
- Armguards and finger tabs must fit the user to prevent injury;
- Releasing the string without an arrow can damage the bow and cause injury; a bow should never be dry-fired.



- Damaged equipment such as twisted limbs, cracked bows or arrows, loose or cracked nocks or loose points, must not be used until they have been repaired or replaced;
- Arrow length is very important. To start with, they should be long. If they are too short they can be overdrawn just before release and can hit the bow and break, or go through the archer's bow hand;
- The feet, body, and head positions must be suitable for each archer to have a clear string release so that there is no damage to the bow arm, face or chest, particularly women's chests;
- Strings can catch on clothing and cause damage and/or the arrow to miss the target. Sleeves should be tight or fastened at the back of the arm, chest pockets should be emptied, and if possible covered, caps turned to the back and any badges, jewellery, and

etc. that may catch the string must be removed. It may be necessary to tie back long hair;

- If possible, belt quivers to hold the arrows should be used but if they are not available, arrows must always be carried points down to the ground. Ground quivers can also be used to hold arrows. Never allow people to run with arrows in their hands;
- Wherever you are shooting, a cardboard cylinder fixed to a bow-stand, or something similar will keep the arrows safely pointing downwards. Also, the bows can be rested against them when not in use, so the equipment is safe and people will not get hurt by falling over it.
- When walking to the target, keep a look out for arrows that did not reach the target. Collect and take them to the target or return them to their owner when possible;
- Make certain you find all arrows before leaving the ground so later users are not hurt by them.



- It is important that people who have been injured or ill are fully fit before returning to shooting and they should begin slowly, shooting only a few arrows and building up to shooting the full number over a period of time.

2.4. Equipment safety

In the above list of prevention of human wounds, there are also some elements concerning the equipment, such as stringing the bow, releasing the string without an arrow... Sometimes arrows do not stick into the target properly and hang down across the target.

If shooting continues, other arrows could hit the hanging arrow, damage both arrows and/or bounce off and not score any points. As soon as you see an arrow hanging on your target,

everyone on the target should stop shooting and inform the person controlling the shooting. The controller should wait till everyone else has finished shooting on the other targets then go down to the target with the hanging arrow with just those archers, score all the arrows in the target (if any scoring is taking place), remove the hanging arrow, and place it at the back of the target. The archers on the target with hanging arrow can then return to the shooting line, finish shooting their arrows and then everyone goes to collect their arrows.

To recuperate an arrow from the grass: 1) Clear the fletching area. 2) Pull backward the arrow in its horizontal axis (level with the ground). 3) Only when the whole shaft is cleared and visible, to lift it up.

2.5. Range etiquette

When shooting is taking place it is important that other archers are not disturbed. Train the archers to be considerate to others on the line. This includes:

- Not talking or laughing loudly.
- Not giving advice to others on the line.
- Not criticizing out loud their own shooting performance or that of others.
- If an archer has a problem, have him move back off the line and seek help rather than asking the archer nearest to him for advice.
- When the archer has finished shooting, let him leave the line while the other archers finish theirs.
- Not touching other people's equipment without getting their permission.
- Not removing other archers' arrows from the target unless the owner has given permission to do so.
- Being careful of the other arrows in the target when they remove their own.
- Being totally honest when calling the arrow values, whether they are theirs or other archers' arrows on the target. If they are not certain of the arrow value, have them ask the others on the target for confirmation.



- Being careful and totally honest when writing and adding the arrow totals.
- Being pleasant to other people, being a good sport.



- Many jobs have to be done to ensure archers are able to shoot their arrows in practice and in tournaments. Always be prepared to help the officials before and after the shooting.
- Remember alcohol and archery don't go together. Never permit alcoholic beverages on the range or before a shoot. Anyone who has been drinking alcohol must not be allowed to shoot.
- Smoking is not permitted in or around the athletes' area. Many places do not permit smoking at all; so make sure you know the rules where you are going to shoot.

In conclusion:

Safety is a key concern when participating in any sport. Being mindful of the potential hazards involved helps keep any risk to a minimum. Whether it be personal safety, equipment care, awareness of first aid procedures or general shooting etiquette, all archers should take the proper measures at the range. In so doing they will ensure a safe and enjoyable sporting experience for all.