

### Hooking (placing the fingers on the string)

he location where the string is placed on the three fingers is very important. Many beginning archers do not go through the preparation exercise for hooking when they attend their early archery lessons, but it is very important for the archer to hook the string in the correct position on their fingers. When placing the fingers on the string, the shape of the wrist joint, and the division of the force on the fingers at the time of the hooking is very important. If the archer does not hook the fingers accurately, the sharing of the power on the fingers changes as the archer comes to full draw, and during the time of extending. Subsequently, according to the placement of the string on the hooked fingers, a change occurs to the direction of flight of the arrow at the time of the release, and the position of the hit on the target will be inconsistent. Consequently, when learning archery at the first time, the beginner should observe and make the location of hooking correctly. If the beginner is given exercises in the method of hooking in advance of shooting a bow it will produce good finger placement, and finger control, at full draw and during the release.





# The position of fingers, the first joint when hooking

ith the hand open, as shown in figure 30, you will see that the joints on the first and third fingers are in line, but the joints of the second finger are out of line due to the differing lengths of the fingers. The amount of this differential will depend on the size and shape of the hand.

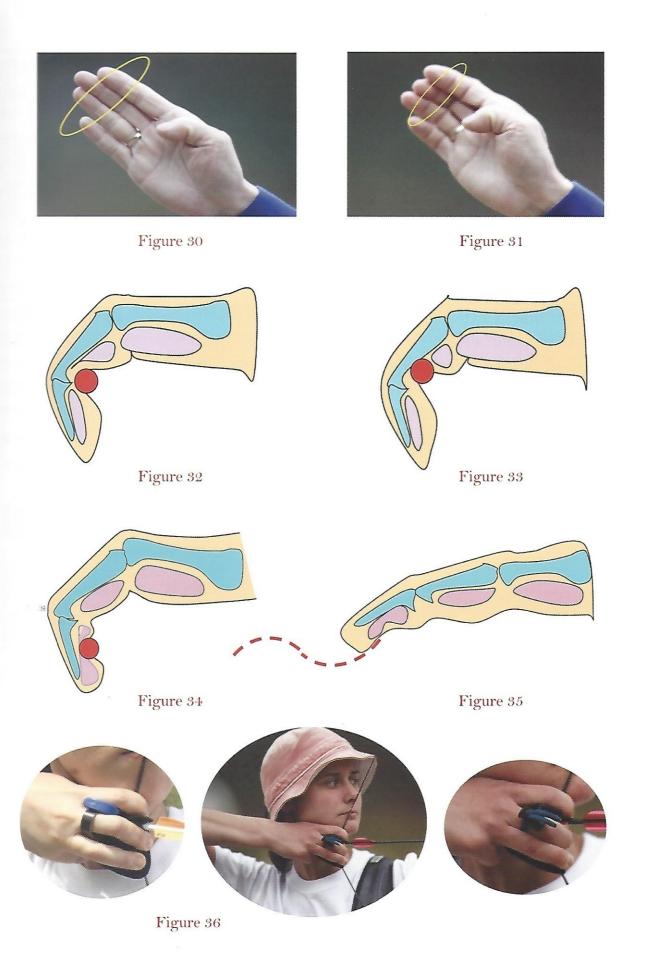
However, when the fingers are bent the second finger bends a little more than the first and third fingers which allow the joints to become virtually in line. The joint location of the bent fingers as shown in figure 31 is very close to being similar. Therefore, even though the length of the three fingers is quite different, there is no problem at the time of the hooking.

As shown in figure 32, the string should be hooked on the first joint of all three fingers when hooking. If the string is hooked on the second joint as shown in figure 33, the time taken for the fingers to slip from the string at the time of the release is quite long. This causes a problem as the speed of the release tends to be slow which often causes mistakes within the release.

If the string is hooked on the cushion of the finger as shown in figure 34, during the release the string moves sideways round the fingers and the flight of the arrow becomes erratic. It would be better to have the string hooked in the first joint as shown in figure 35. If the string is not hooked correctly on the ring finger, the string slips from this finger at the time of extending as shown in figure 36. With this problem, the archer becomes aware of it mentally and to tends to press the string with the ring finger in an effort not to let it slip off the string. If the archer presses the string, the force of all three fingers also tends to curl inward when releasing and the movement of the string causes inconsistent arrow flight. Hence, in the case of the right-handed archer, the arrow gets to fly to the left of the target.

This problem becomes more evident when it is raining as the fingers slip much more during wet weather, this could cause the archer further problems as it is likely that they will feel uneasy about it psychologically.







## The position where the string is placed on the finger tab

ost beginners, when learning archery for the first time, use a finger tab which other archers have used before. Quite often this "borrowed" tab is either larger or smaller than the beginners own hand and consequently does not fit correctly, as shown in figure 37. In such a case, the location where the string is hooked on the finger tab might not be correct. Therefore, when the beginner starts archery and shoots for the first time, the correct and proper fitting finger tab must be used, as shown in figure 38. With a correctly fitting finger tab, the archer can hook the string in the correct position on the finger tab. If the string is placed at the inside of the finger tab as shown in figure 39, it is possible to have an inconsistent arrow flight because the nock of the arrow touches the finger tab at the time of release. And, if the string is positioned too far along the fingers as shown in figure 40, the fingers tend to be slip off the string at the time of the extending. To help the beginner find the correct position for placing the fingers on the string, a line can be drawn on the finger tab where the string should be placed. This will also help the beginner to replicate the correct position time after time.





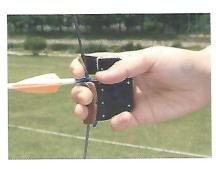


Figure 37

Figure 38

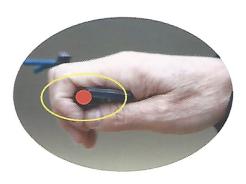


Figure 39



Figure 40



## The distribution of the force on the fingers which are hooked onto the string

t is not easy for the archers to properly distribute the force on the three fingers which are hooked onto the string. Also, it is not good, and very difficult, for archers to divide the power on the three fingers by themselves. Depending on the position of the drawing elbow at full draw, the power sustained will be different for each of the three fingers which are hooked onto the string. If the archer's drawing elbow is low, the main force moves to the forefinger as shown in figure 41, and if the archer's drawing draw elbow is too high, the main force will move to the ring finger. With the archer's drawing elbow at the correct height the action of extending will become more natural, as shown in figure 42, and the force will be distributed correctly enabling the release to be executed naturally. When hooking the three fingers on the string, it is better to let the power distribute on the three fingers naturally. The distribution of the natural power will be divided automatically accordingly to the height of the drawing elbow and the length of the archer's fingers.



Figure 41



Figure 42





#### The position of the fingers which are not hooked on the string

he archer hooks the string with the first three fingers of the hand and does not use the little finger, or thumb, at this time. However, the little finger and thumb which are not used are as important as the three fingers which are used. The most important thing at this time is that the little finger and thumb should remain totally relaxed.

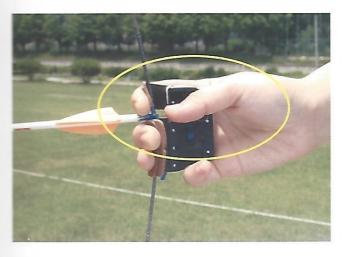
If force is felt on either the little finger or thumb, tension will be applied to the three hooking fingers which will be evident during the release, when this happens the archer cannot release smoothly. The thumb should be relaxed and bent slightly inward as shown in figure 43.

As you can see in figure 44, the thumb is lifted up and is fixed under the chin to provide an anchor for the string hand. Use of the thumb in this way is not advisable as it will cause inconsistencies in the anchoring position. For a consistent anchor the hand should be fixed under the chin and using the upper part of the forefinger to make contact with the chin, as shown in figure 45. At this time the little finger, as shown in figure 46, should be relaxed and slightly bent. If the archer bends the little finger too much and has it under tension, tension enters the fingers which are hooked on the string, and this will cause too much tension being used at the time of release.

The first joint of the little finger should be bent lightly, as shown in figure 47, and the direction of the little finger should be natural and relaxed. All muscles and nerves of the five fingers have some influence over each other. Therefore if tension enters one finger, the other fingers also have a tendency to tense up.

If the fingers that are not used to hook the string are naturally relaxed, the other fingers, that are hooking the string, tend to relax quickly and more naturally when the finger muscles (flexors) are relaxed. As a result, the archer can execute a natural and smooth release.





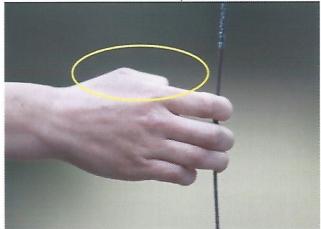


Figure 43

Figure 44





Figure 45

Figure 46



Figure 47



# The ring finger slipping off the string

here are many archers who let the ring finger slip off the string at the time of extending as shown in figure 227. If the ring finger slips off the string the gripping pressure the archer puts onto the fingers is still there and the ring finger presses onto the string. This makes the archer feel uneasy as they try to stop the finger slipping off the string. If the archer does press the string with the ring finger it will cause the string to have a wider deviation at the time of the release, and the arrow will strike the target to the left of centre for the right-handed archer, and vice versa for a left -handed archer. When releasing, if the three fingers do not release from the string at the same time, as shown in figure 228, the direction of release is not constant because the ring finger curls inward or downward as the rest of the fingers are released. This will cause the extending time to be inconsistent and the force of the release to be erratic; all this will have a bearing on the string movement which will affect the arrow grouping in the target.



Figure 227

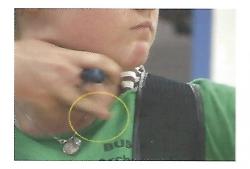


Figure 228

### The causes

- P The drawing elbow is raised too high.
- P The hand is twisted toward the outside when anchoring.
- P The string is hooked on too far to the outside of the finger tab..
- P The ring finger has straightened and not held the position of the hook at the time of anchor.
- P The string is hooked nearer to the end of the fingers than the first joint.
- P Extending through the clicker by curling the fingers.



#### Modification

fter checking the finger tab, make sure the position of the string locates correctly on the fingers for the best position for hooking. The archer, who hooks with the string too far down the fingers before drawing the bow, as shown in figure 229, will find that as the weight of the bow increases during the draw the string will slip toward the tips of the fingers. It is best to place the string a little inside of the first joint of the fingers during "set-up" as shown in figure 230, then as the weight of the bow increases during the draw the string will slip into the first joint automatically at the time of anchor.

Whilst in the anchor position the hand should not be twisted or the wrist bent, and the height of the drawing elbow should be just above the arrow line. The direction of the ring finger should face a little inward at this time as shown in figure 231. And, as shown in figure 232, if the second joint of the ring finger is bent slightly, the first joint of the ring finger bends automatically. If the archer lifts the elbow up too high whilst in the anchor position, the ring finger tends to slip off the string. Sometimes it may help to overcome this problem if the tab has an anchor plate fitted to it, but beware, because the archer may fix the anchor plate too hard to the chin which will cause them to extend with the hand. If the anchor is fixed completely, the drawing elbow is not used, and the extending is done using the hand and the string will not slip off the fingers efficiently.

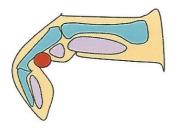


Figure 229



Figure 231

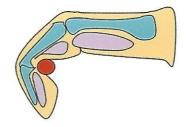


Figure 230



Figure 232

