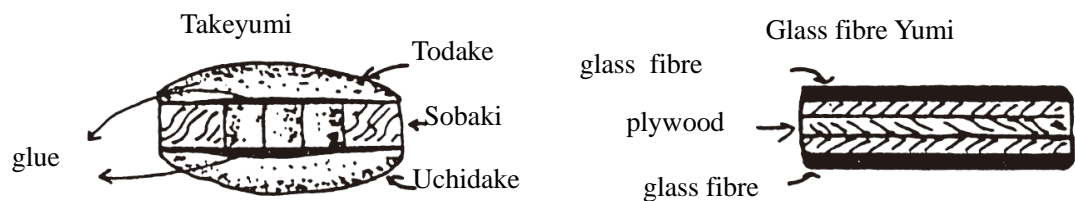


## Kyudo Equipment Care

The minimum equipment necessary for Kyudo comprises the Yumi, Ya, Tsuru and Yugake (or Kake).

- ① *Yumi* ⇒ As the *Yumi* is strung by reversing its natural curve to increase the mechanical stress and launch the *Ya* with maximum power, poor care of the *Yumi* may lead to irreversible damage. The structure of *Takeyumi* (bamboo *Yumi*), which are made of wood and bamboo glued together, and glass fibre *Yumi* is shown in the diagrams below.



*Yumi* are sensitive to moisture, especially when the temperature is high. Therefore, in Japan, special care should be taken during the rainy season that the *Yumi* is not exposed to humidity, and moisture be removed by wiping the *Yumi* with a dry piece of cloth. (Rubbing the *Yumi* down with oil is also a good way to prevent it from absorbing moisture.) \*Vegetable oil should be used.

### **Additional Explanation**

- 1) The length of the *Yumi* is proportional to the size of the body, but nowadays the *Namihoko* with a standard size of 2.21 m (7 *shaku* 3 *sun*) is used by most people. (Taller people over 1.6 m use a *Yumi* which is called *Nisun-nobi* and is 2.27 m (7 *shaku* 5 *sun*) long.)

- ② *Ya* ⇒ A *Ya* is made of one stalk of bamboo and three feathers.

The *Ya* which are used nowadays are either traditional *Takeya* (bamboo *Ya*) or metal *Ya* (made of aluminium). (More recently, there are also arrows made of glass fibres or carbon fibres.)

Like *Takeyumi*, *Takeya* are sensitive to moisture and should be rubbed thoroughly until hot with a dry piece of cloth to prevent moisture from setting in.

(As for the *Yumi*, oil may be used as a sealer.)

(*Ya* can withstand strong longitudinal stress but get easily damaged by radial stress, so care must be taken while rubbing them.)

It is preferable to use *Ya* that are on the longer side for safety.

### **Additional Explanation**

- 1) *Ya* are divided in two types: *Haya* and *Otoya*. One *Haya* and one *Otoya* are used together as a pair called *Hitote*. *Yotsuya* refers to two pairs of arrows (*Hitote*) used together. When nocking the *Hazu* on the *Tsuru*, *Hashiriba* must be on top.
- 2) For the Japanese terms above, refer to the « Kyudo Equipment Terms » section.

- ③ *Tsuru* ⇒ *Tsuru* can be divided in *Asazuru*, the traditional type made of hemp fibres, and synthetic (Kevlar) *Tsuru*, the use of which is more recent. Traditional *Asazuru* are made of thin strands of hemp fibres spliced and twisted together. The *Tsuru* are then filled with *Kusune* to make them stronger, this is why they are slightly sticky.

Synthetic *Tsuru* are made of long synthetic threads twisted together. They are then strengthened with adhesive resin (similar to *Kusune*).

*Asazuru* become fluffy and prone to beaking as they dry. Therefore, they should be rubbed with *Waraji (Magusune)* each time the *Yumi* is strung.

Use energetic downward motions when rubbing the *Tsuru* with *Magusune* so as to keep with the direction of the twist. The *Nakajikake* also should be wrapped in the same direction as the twist of the *Tsuru*.

#### **Additional Explanation**

*Kusune* : Pine sap mixed with oil and boiled gently to a soft consistency.

It is applied on *Asazuru* to reinforce them. (This is not necessary on synthetic *Tsuru*.)

*Magusune* (generally called *Waraji*) : used to add *Kusune* to the *Asazuru*. Heated by the friction with the string, the *Kusune* melts and fills in the *Tsuru*. (Do not use it on synthetic *Tsuru*, it is counterproductive: the *Tsuru* will get fluffy.)

*Nakajikake* (usually called *Shikake*) : a string serving used to locate the nocking point and protect the string from wear. It can be made with strands of fibres taken from broken *Tsuru*.

- ④ *Yugake* ⇒ *Yugake* are made of soft deer hide and are most sensitive to moisture.

If a *Yugake* is worn directly on the skin and absorbs sweat, or if it is accidentally put in contact with water, it will become hard and unusable. Therefore, a *Shitagake* should always be worn under the *Yugake*. Moreover, in wet weather, the *Yugake* naturally absorbs moisture from the air and should be set to dry. (Warning: do not dry under sunlight or use heat.) Dry the *Yugake* in airy shade. Be careful that the *Tsurumakura* does not lose its shape. For proper friction with *Giriko*, the *Bôshi* must be kept dry and care should be taken that the middle finger or the ring finger which is placed on top does not become sticky with sweat.

#### **Additional Explanation**

*Shitagake* : a cotton cloth worn under the *Yugake* to absorb sweat (usually white).

*Tsurumakura* : the place where the *Tsuru* is hooked on the *Yugake*.

*Bôshi* : the hard part of the thumb of the *Yugake*.

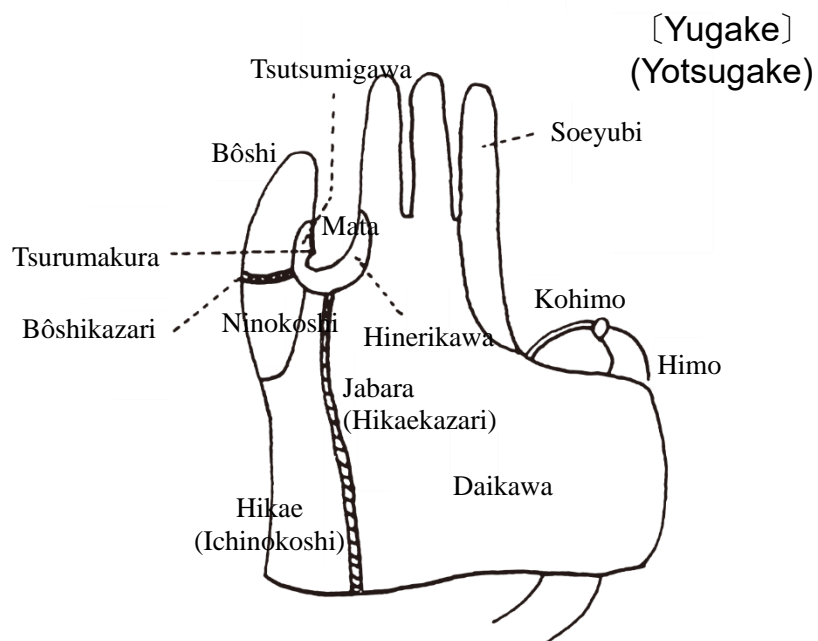
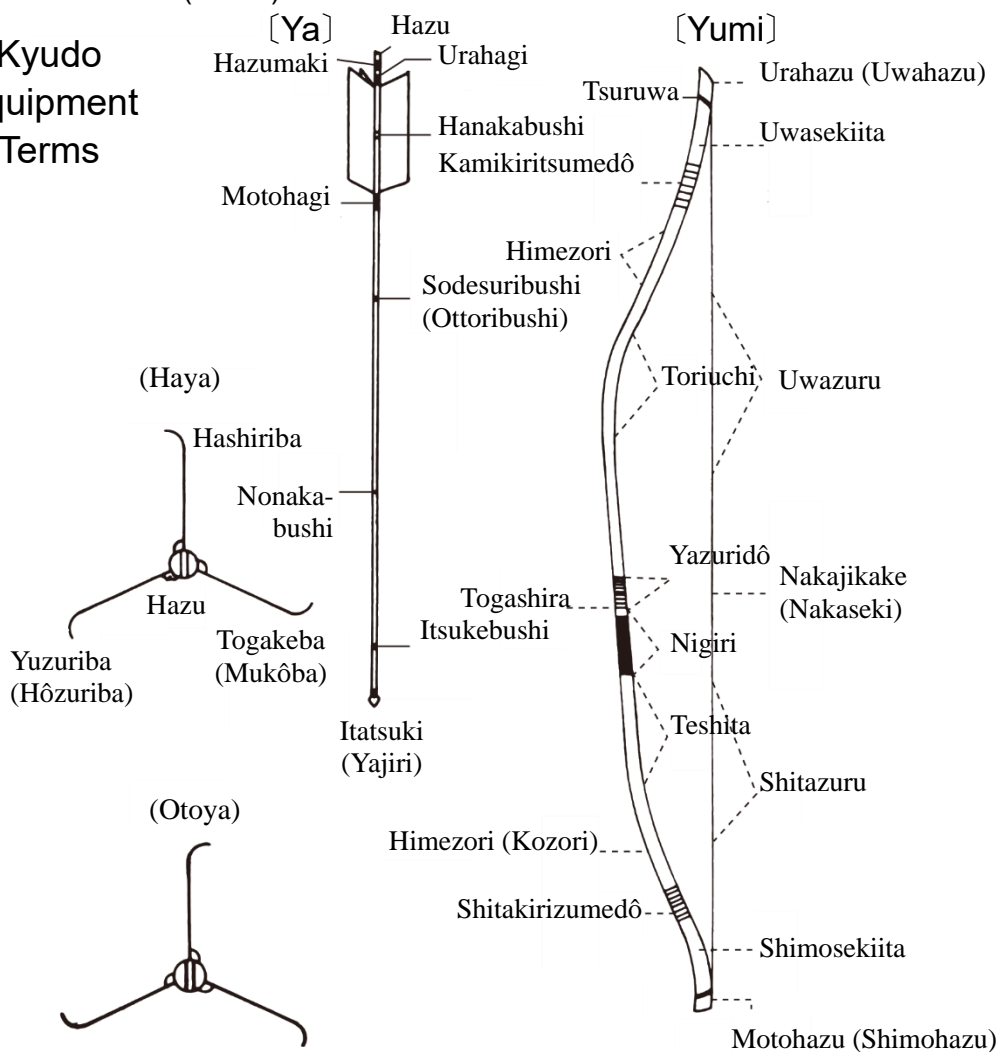
*Giriko* : a non-slip powder made from pine sap boiled down until almost all the oil has evaporated.

#### **Additional Explanation**

1) The usual types of *Yugake* are *Mitsugake*, *Yotsugake* and *Morogake*.

Beginners may use a special type of *Yugake* called *Yawaraka-Bôshi* ("soft *Bôshi*").

# Kyudo Equipment Terms



## Terms for the Parts of the Kyudojo

