Many string players consider that bounced, off-the-string strokes such as *spiccato*, *staccato*, *ricochet*, *sautillé*, are difficult or complicated, while on-the-string strokes are easier. This is probably true right at the beginning of learning to play a stringed instrument, but many players then continue to hold this belief right through into more advanced stages of playing.

Thinking that a stroke is difficult can make it so because you ‘interfere’ and ‘get in the way’ of it happening naturally. In fact, far from being more difficult the reverse is true: because of the bow’s natural spring, lifted bowings are more a matter of *letting* than of *making* the strokes happen. To play sustained strokes you have to actively work against the natural force of the wood and hair.

The wood of the bow, the hair and the string, are all springy. When you sustain a stroke deeply into the string, playing into the springiness of the wood of the bow so that it is pushed down towards the string, all that the bow wants to do is to spring up out of the string again. The bow does not sit in the string as a dead weight.

The bow is so eager to bounce that it is perfectly possible to play *spiccato* while holding the bow only with the thumb and second finger. Take the first, third and fourth fingers off the bow and simply push the bow up and down along the string. Let the bow play the *spiccato* by itself:

![Example](image1)

This may be easier to do if you begin with a normal bow hold and drop the bow on to the string from the air to play the first note. Then take the fingers off the bow and continue. Bow a little below the middle.

**Legato slurs**

In ricochet the speed of bow and weight must be even, and the left hand fingers rhythmically even.

- Build greater evenness into both hands by first practising the passage without ricochet, playing normal legato slurs.
- Learn how to play the passage with slurs as if you were going to perform it like that. Aim for evenness of bow-speed and weight, with smooth string crossings that begin to move over to the new string early.
- Play in the same part of the bow, and with the same length of bow, as you will use eventually for the bounced stroke (in this case midway between the middle and the point, with as little length as possible). Also use the same amount of hair as you will use for the ricochet, i.e. not too tilted.
Experimenting with proportions

Ricochet is played in the upper half. Like *spiccato*, the main proportions to consider in ricochet are length of bow to height of bounce. In *spiccato* ‘length of bow’ means the distance the hair moves along the string during each note (from very short near the middle of the bow, to as long as a centimetre in a heavy *spiccato* near the heel). In ricochet length of bow means the distance travelled in the air between the bouncing contacts with the string, the length of each note staying more or less the same.

Ricochet nearer the middle: lower bounce, less bow, faster.  
Ricochet nearer the point: higher bounce, more bow, slower.

- First practise the stroke on one note. Play a group of ricochet in each area of the upper half. Start in the middle of the bow, work all the way up to the point and back down again to the middle.
- At the middle of the bow use a tiny amount of bow, with a very low, heavy and fast ricochet. As you play the group higher and higher in the bow use more bow and a higher, lighter and slower ricochet. At the point the ricochet will be very high and slow, and will use as much as a quarter of the bow in length.

Experimenting with string crossings

If string crossings disturb the evenness of the stroke, first practise them in all combinations on open strings: