Make your own bird wings

STEP **1**&**2**: Measure your "wing span" and make the "bones" for your wings

A bird's wingspan is the distance between the tip of one wing to the tip of the other.

Stand up straight with your arms out to the side, using your body to make the letter "T". With help, measure the distance from your middle fingertip to the other fingertip - this will be your wingspan!

Cut your cardboard into long strips about 10cm wide. Tape them together to make a rectangle as long as your wingspan. Clearly mark the middle point on vour cardboard with a pen. Make arm straps to attach at the ends too.



STEP **6**: Add the first layer of converts

Use a whole page of newspaper for these feathers. Tape them on like in the picture. The converts at the ends should be on a little bit of an angle. **Convert feathers** are contour feathers that cover over the base of the flight feathers (check out page 5 for more on contour feathers).



= middle point

You'll need:

- Tape
- Scissors
- Newspaper
- Measuring tape Thin cardboard
- (like a cereal box)
- Pen



STEP 3: Add the flight feathers

Use a whole spread of newspaper (two pages joined) for these feathers so they are long. Tape them on as in the picture. The primaries should be on a little bit of an angle.

- The primary feathers are the largest flight feathers and help the bird propel (push) through the air. If they are lost or damaged, a bird can't fly. Most birds have 10 of these feathers. Together, they are a bit like the "hand" of the wing.
- The secondary feathers go along the "arm" of the wing and help birds lift and stay up in the air.
- The **tertiary feathers** are on the "upper arm" part of the wing. They are much shorter than the others.



STEP **5: Add the second layer of** converts & the alula

Use a whole page of newspaper for the convert feathers turned sideways and a half page kept straight up and down for the alula feathers. Tape them on as in the picture.

The **alula feathers** are attached to the "thumb" of the wing. There are usually three to five feathers. They work a bit like slats on the wing of a plane helping to get even more lift.



STEP **2:** Cut and shape the feathers.

Fringe cut each layer of newspaper, then cut the ends to make them look like feathers. Extra for experts: Curve the shape of the converts and alula feathers so your wings look more bird-like.





STEP 6: Add the scapulars

Use a quarter page turned sideways. Tape on in the middle as in picture.

Once you've made both sides of your wings, add the scapular feathers. They cover the "shoulders" or the base of the wings.

Optional: Decorate your wings

Make them represent you with colour/s and patterns!

Send us photos of your mahi to kcc@forestandbird. org.nz

Thanks Alina, our KCC Volunteer Advisor, for being our wing model!

