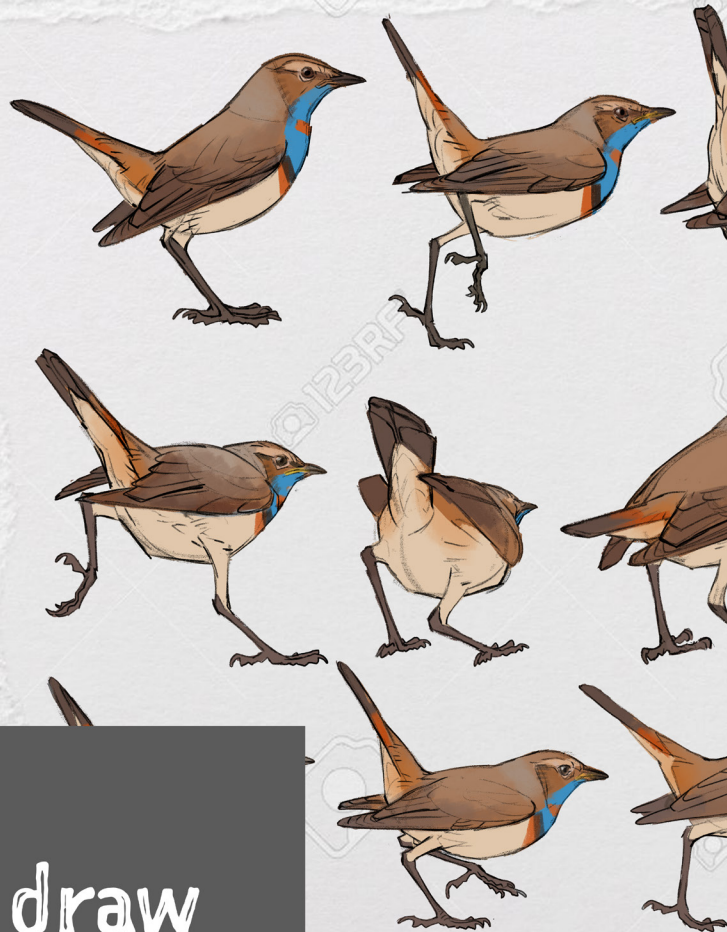




How to draw BIRDS

Of the Passerine order



Special thanks to everyone for their continued support to make
this book a reality!

Kazia Harman

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Bombird

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Helen Barker

Wendy Hauschildt

Caiu

Erin Ellingwood

Matt H

Sonja

Kenkins

Sally Blandford

Rosemary Mosco

Ozawk

Elahrairah

K de Vries

Julia Lundman

Jen Cross

Rosso

Eileen Prescott

JJL

Erkshnrt

Austin Zheng

Doveless

Frith Dotter

Jo

Althea Espejo

Tracey Thompson

Dilong

Steve Dudley

MissMonster

Elyse M. Grasso

Purple bond

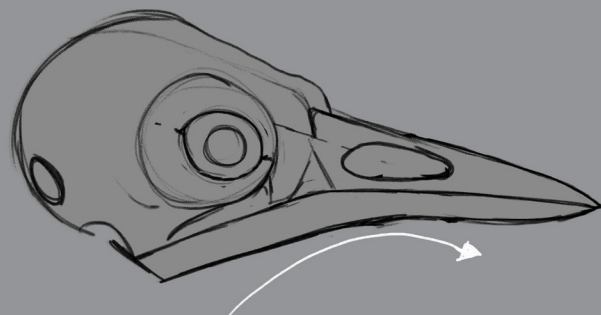
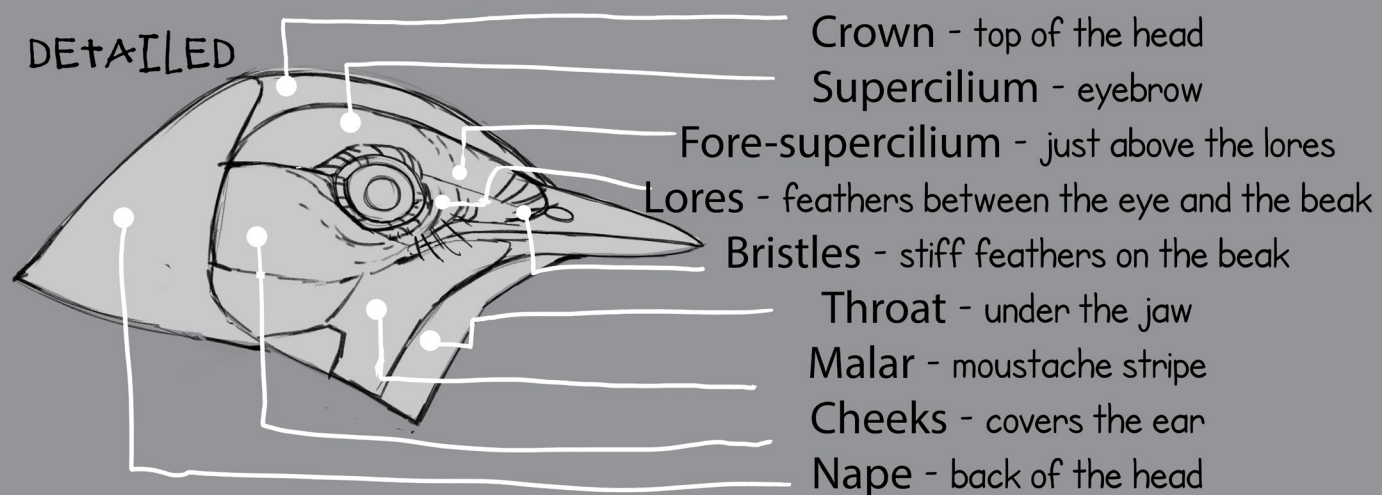
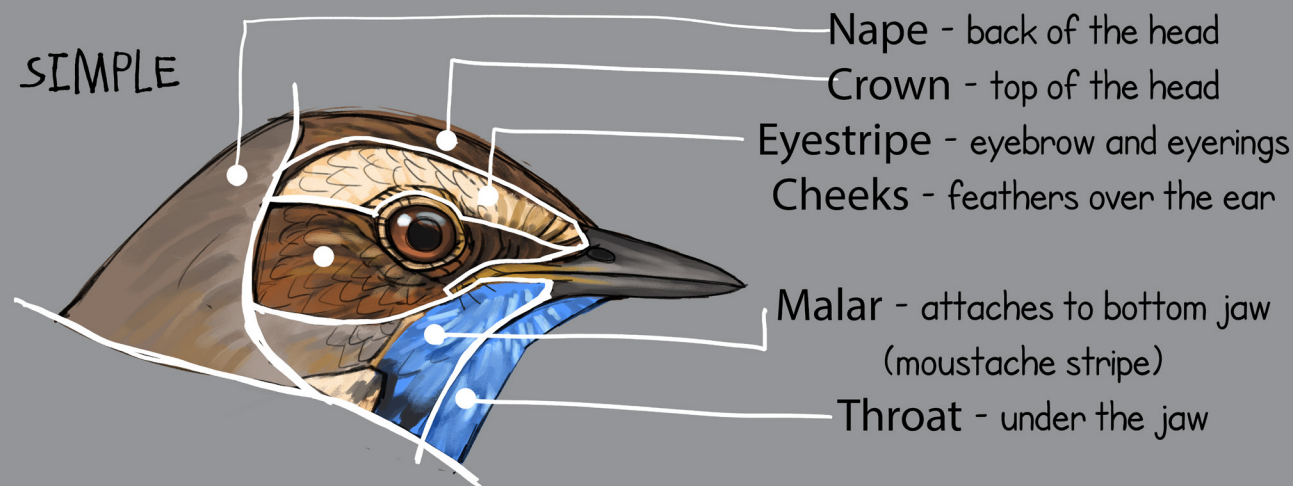
PATREON

| Thank you, Patrons!

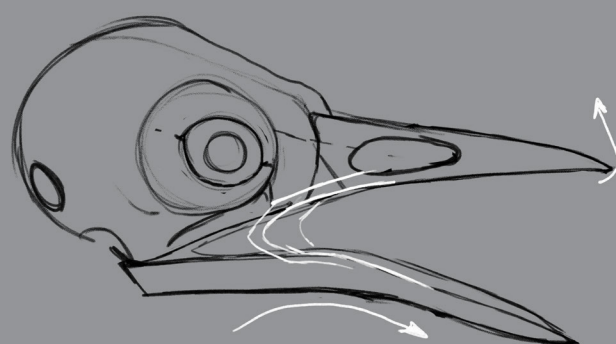
Bird head and beak

Bird beaks come in all different shapes and sizes. They are important tools and are specialised for each species depending on their environment and diet. Here is a look at the passerine type (perching birds or songbirds), which includes more than half of all bird species.

However, this guide can be used for all species of bird.



THE BOTTOM JAW IS CURVED NOT STRAIGHT



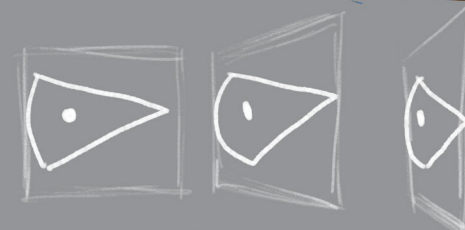
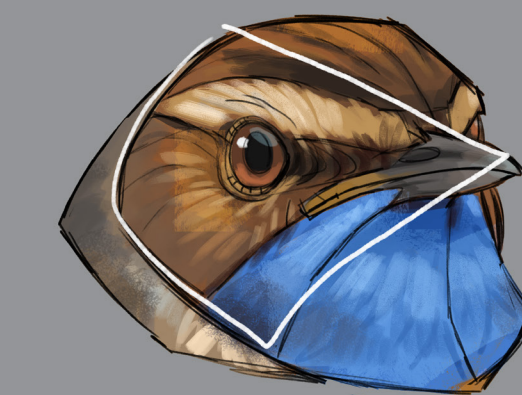
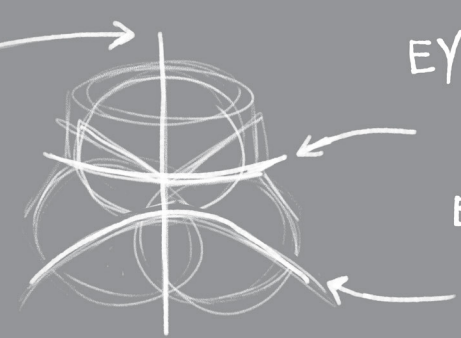
THE TOP OF THE BEAK CAN BEND SLIGHTLY WHEN THE BEAK IS OPEN

CENTRE LINE

EYE LINE

BEAK LINE

A quick guide to help draw the face from the front, similar to drawing faces of people.



Practice drawing the triangle in different perspectives. This will help in drawing the bird head from all angles.



REMEMBER THE FACE IN 3D

EXPRESSION

All birds use their feathers to express emotion, whether it's to tell others their mood or to dance for a mate.

CREST

CHEEKS



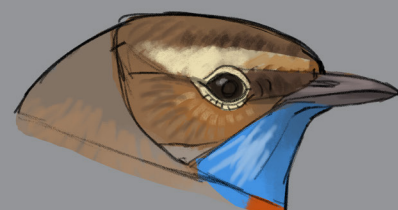
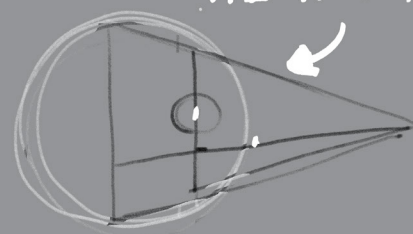
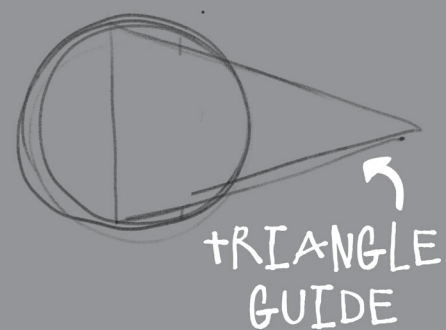
- DEFENSIVE
- EXCITED
- AGGRESSIVE



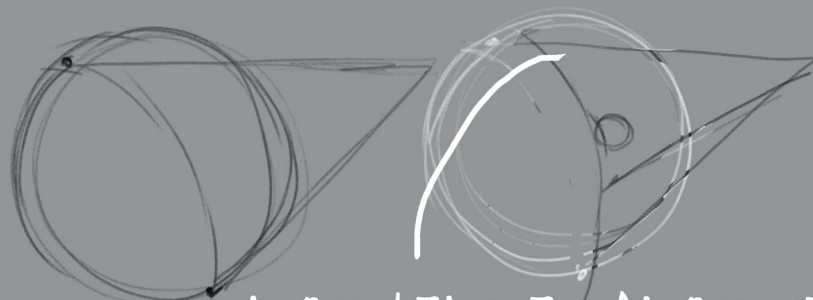
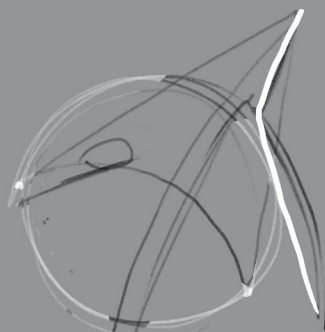
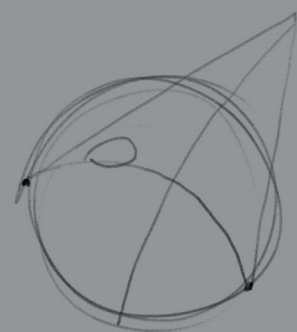
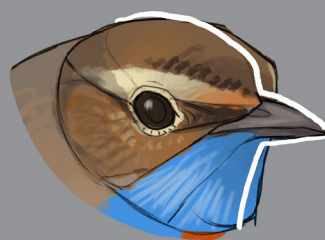
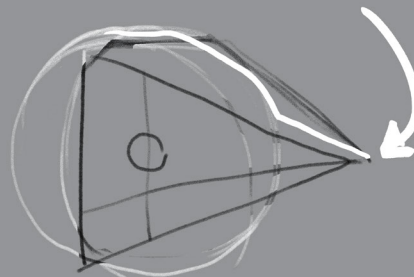
- ALERT
- FEARFUL

Using shapes and guides to draw the head from any angle.

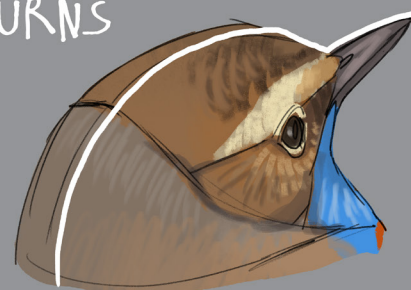
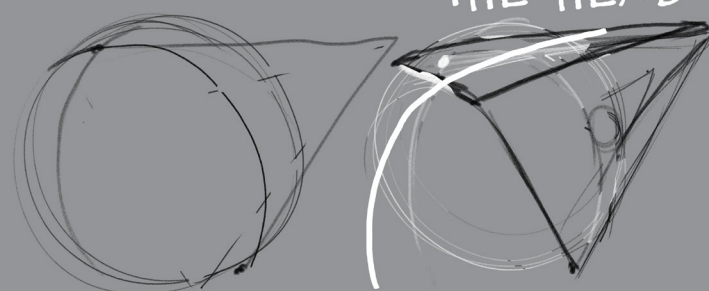
EYE CENTRE LINES UP WITH CORNER OF MOUTH



CENTRE LINE

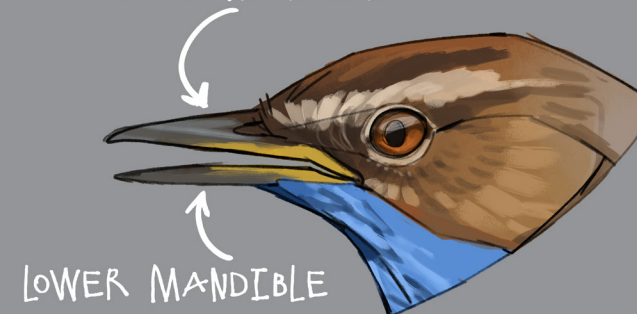


CENTRE LINE IS MORE VISIBLE WHEN THE HEAD TURNS



Bird beaks are made out of Keratin (the same as our fingernails) which makes the beak hard, durable and can keep repairing to remain sharp and glossy.

UPPER MANDIBLE



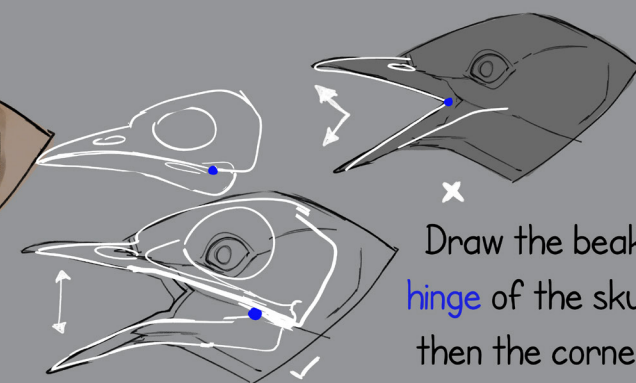
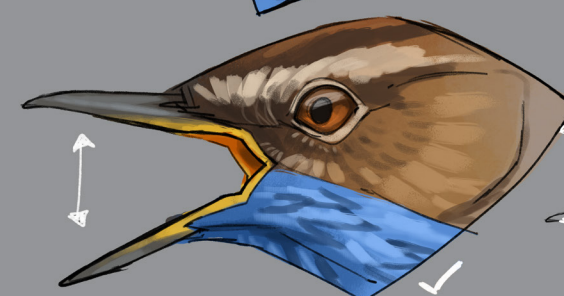
LOWER MANDIBLE

The upper mandible is attached to a flexible soft bone on the forehead. This helps the upper beak to move back and forth. It isn't independent from the skull.

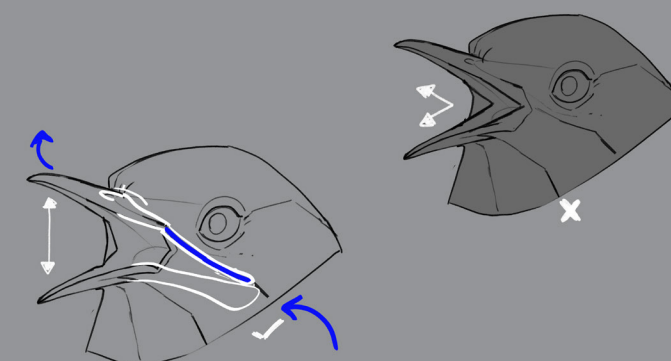
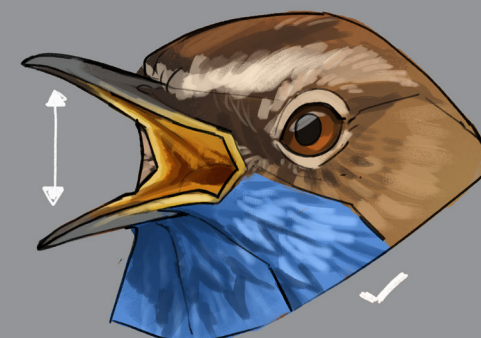
Cranial kinesis helps the upper beak move forward and back.



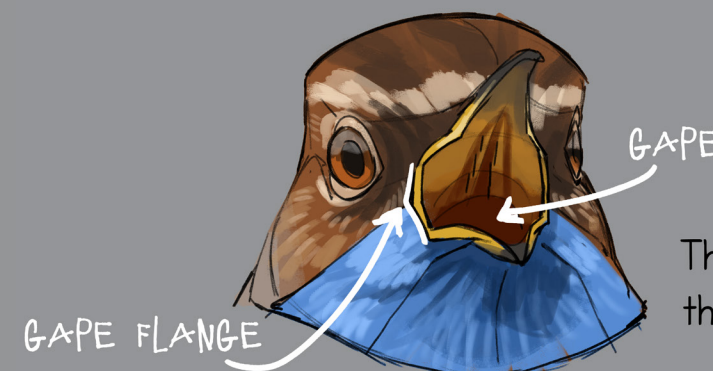
The lower mandible is hinged and can move up and down independently.



Draw the beak at the hinge of the skull rather than the corner of the mouth.



Cranial kinesis moves the top beak up for a wider gape.



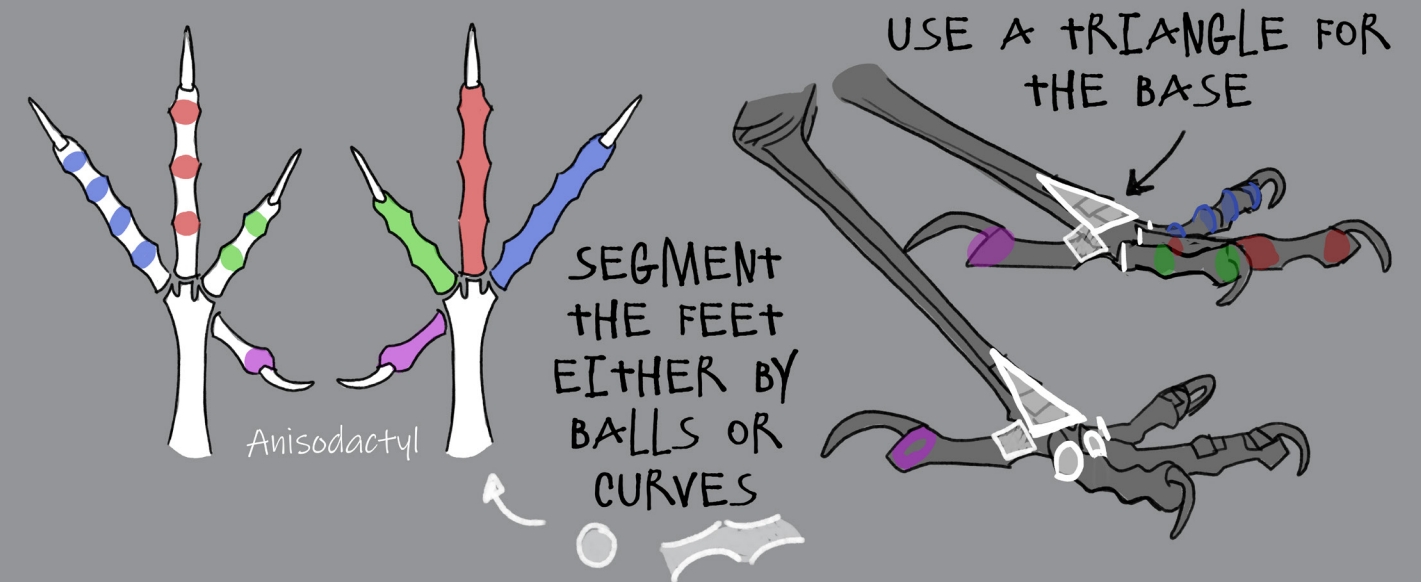
GAPE

GAPE FLANGE

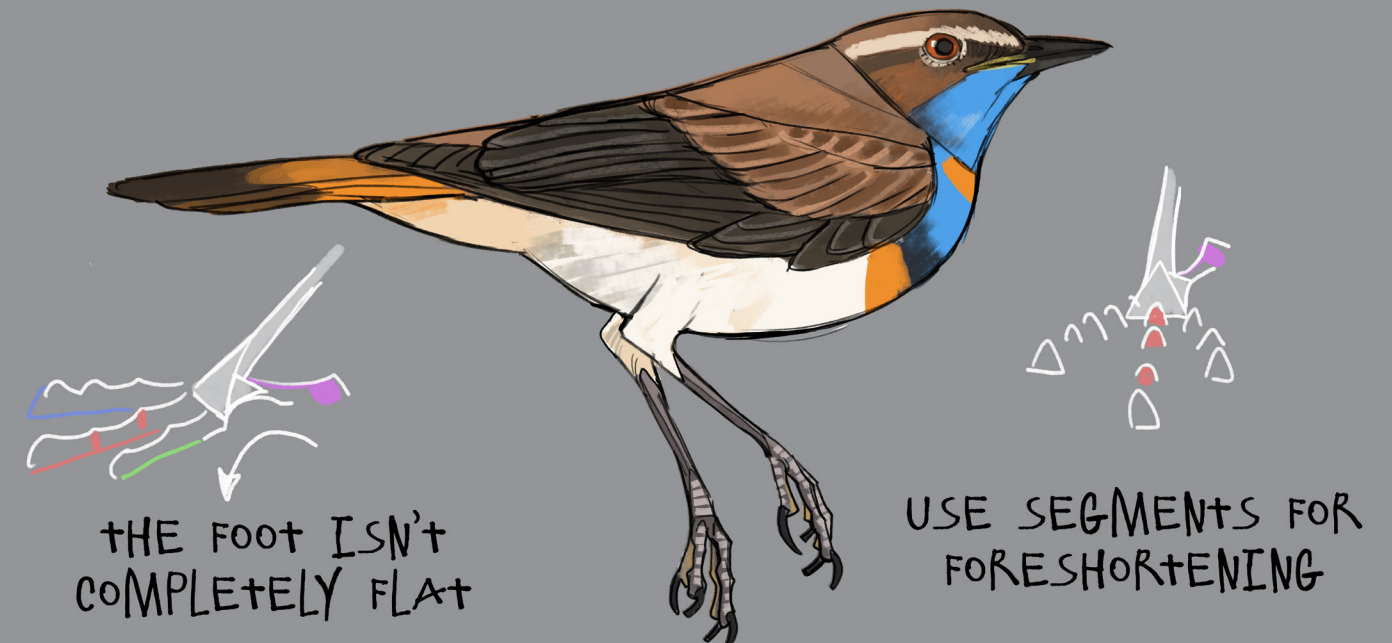
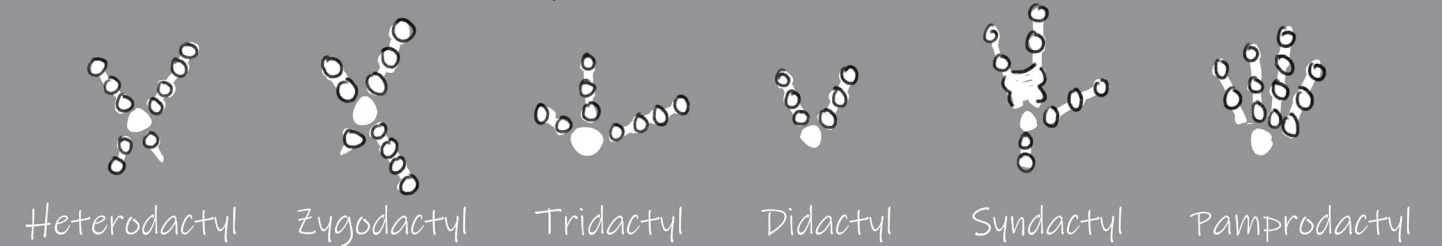
The gape is the inside of the open mouth while the gape flanges are the soft corners of the mouth.

Bird Feet and digits

Bird feet come in many different arrangements depending on the species and their habitat. This tutorial goes through the most common shape, but the techniques can be applied to all types. Each toe has a set amount of segments which will be used for the base of the feet.

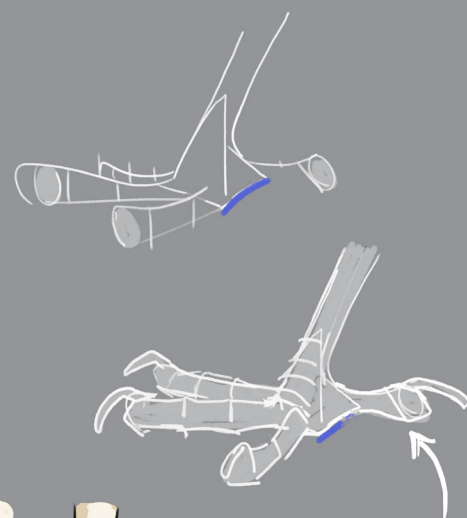
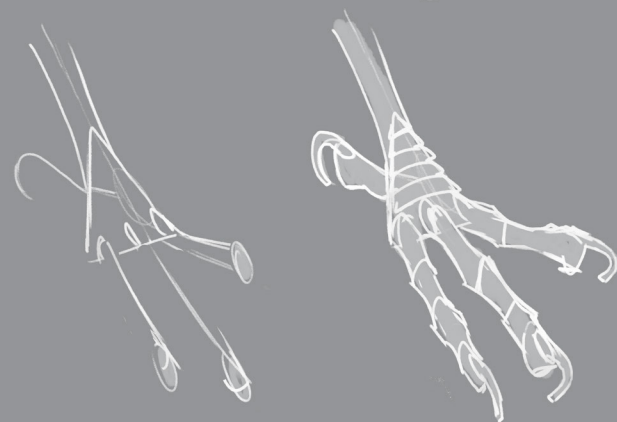


DIFFERENT TYPES OF FEET TO RESEARCH

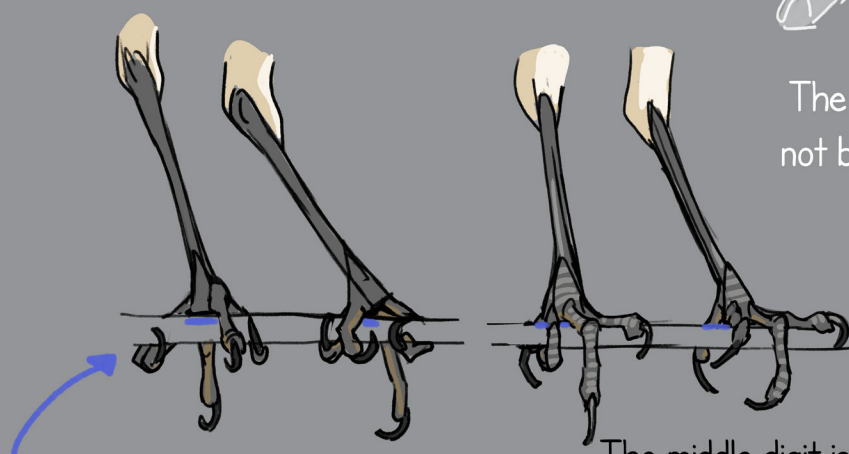


1. Start with the base of the feet. 
Then add the direction of the digits.

2. Segment each digit either with
balls or curves for emphasis.



The back foot does
not bend as it has no
joint.

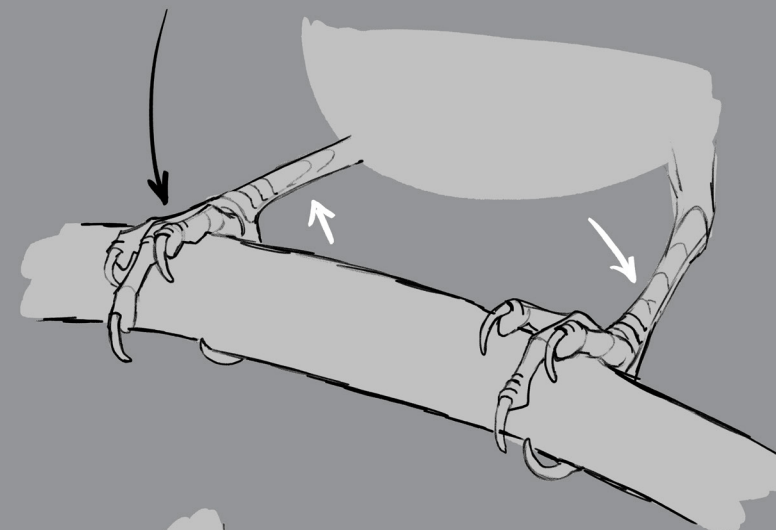


The curve of the feet is for balance and the
back toe is like our thumb.

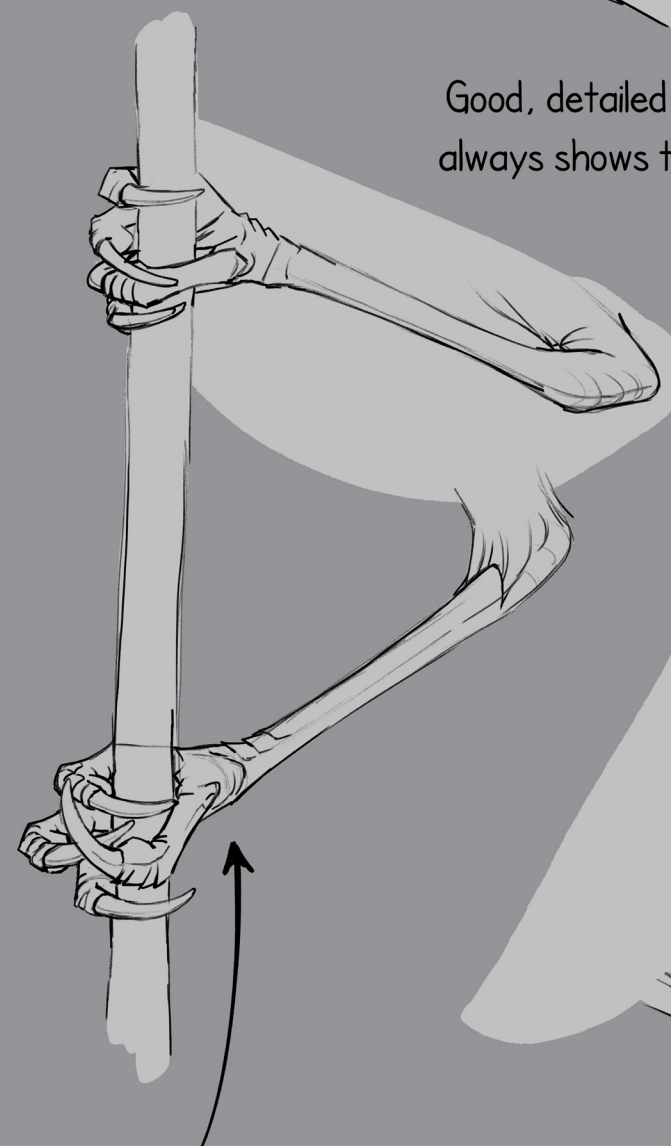
The middle digit is the longest and can
appear relaxed on thinner branches.



The foot may wrap around the branch towards the front
while the other rests lightly at the back.



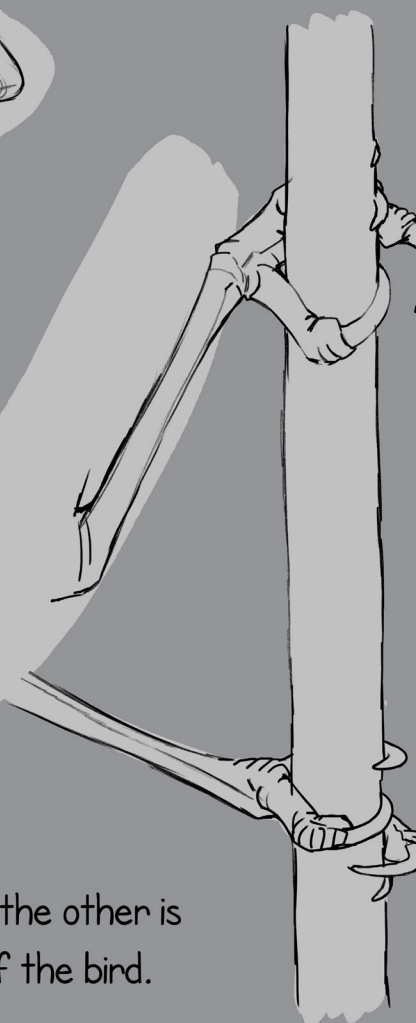
Good, detailed and expressive feet
always shows the character of the
bird.



One leg is held close to the body while the other is
usually straight to hold the weight of the bird.

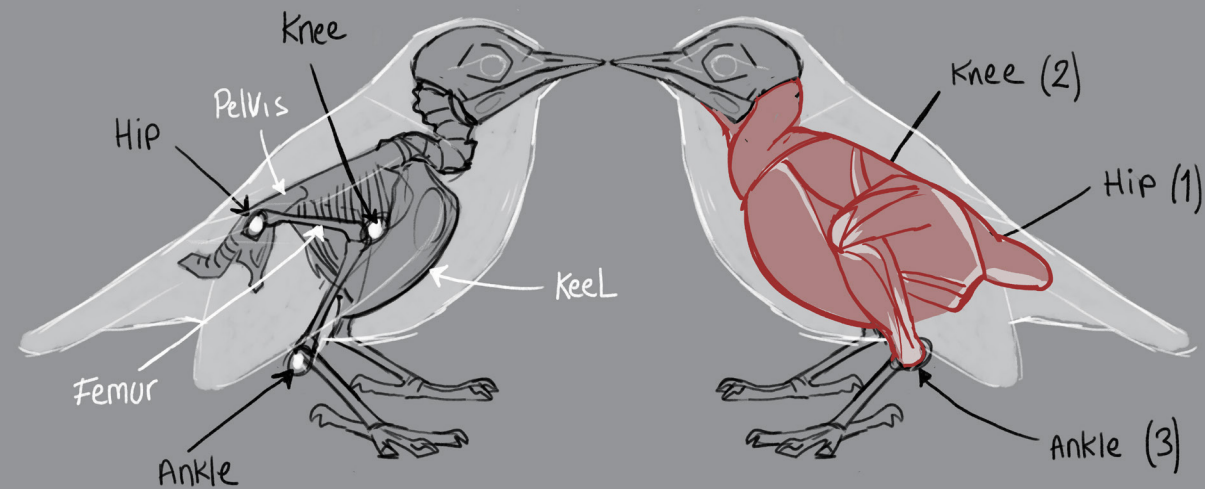


The toe at the
back is always
straight as it can't
bend.
It is the curve of
the long claw that
holds onto the
branch.

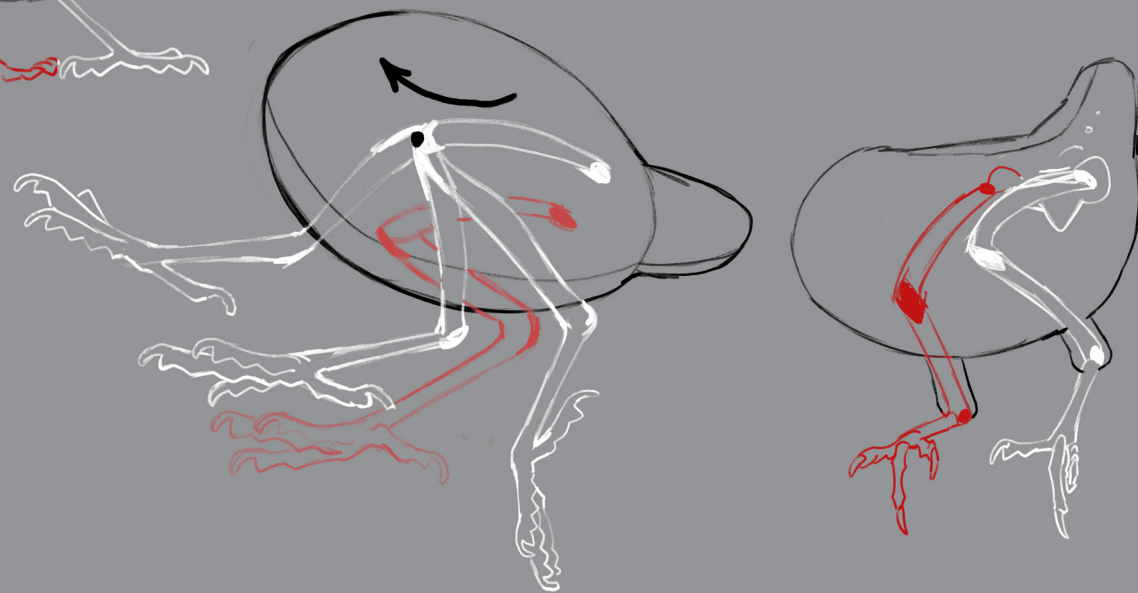


Knees and Ankles

Bird leg bones are heavy compared to the rest of the skeleton. This weight gives them a lower centre of gravity and prevents toppling over easily. The centre of balance can be found at the knee (2) with mobility at the ankle (3).



When drawing both legs, start from the hip and mark where the knee would be. Lightly draw where the leg on the other side would be to pose the other leg.



USE THE FEET TO EXPRESS THE BIRD'S INTENTIONS OR EMOTIONS

Simplifying the anatomy can help build a quick picture when sketching birds quickly. You don't have to remember or draw the anatomy absolutely perfectly, but gesturing it can give the same amount of realism with less work.

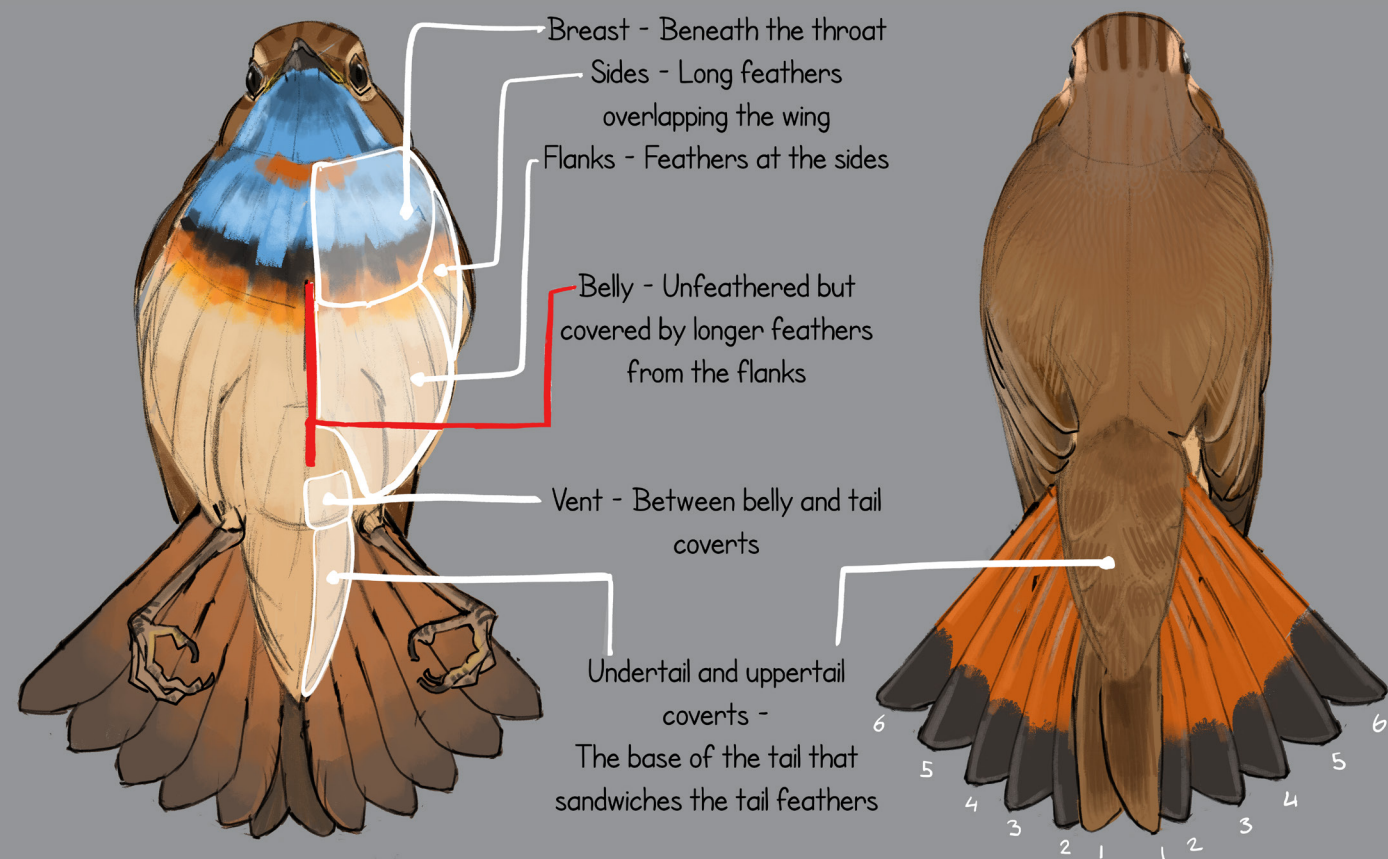
USE A SIMPLE SHAPE FOR THE BODY

THE CENTRE OF THE OVAL IS THE CENTRE OF THE BIRD

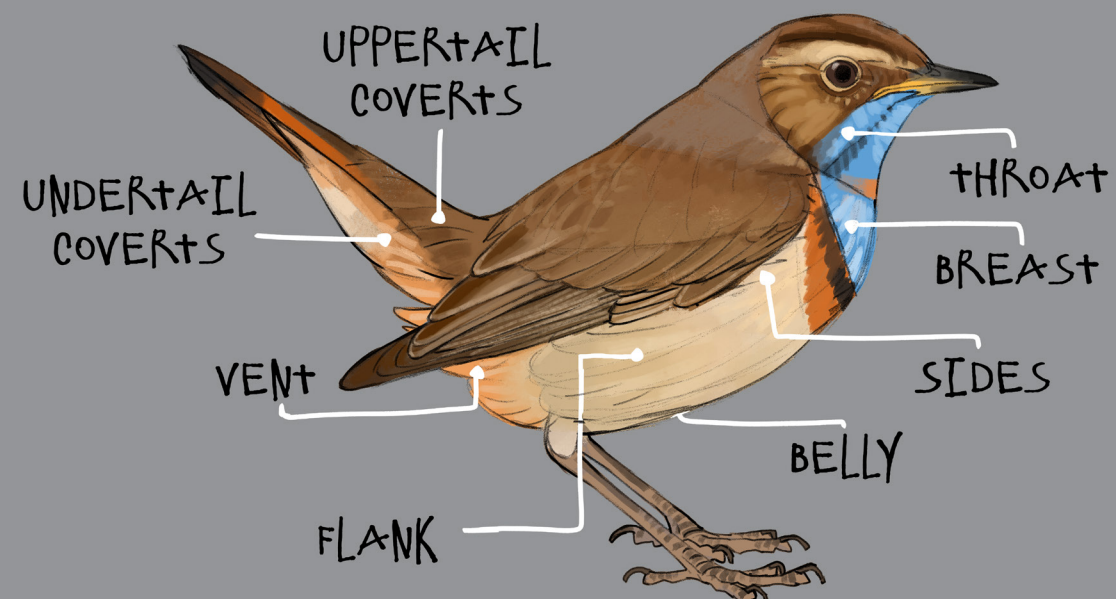


The images below show the range that the leg can extend to. The bird can run and leap with ease, as well as scratch behind their ear or fight with other birds.

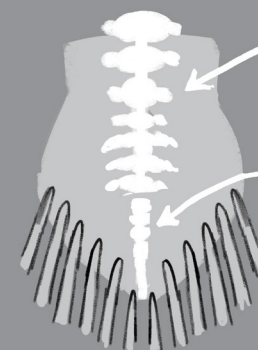
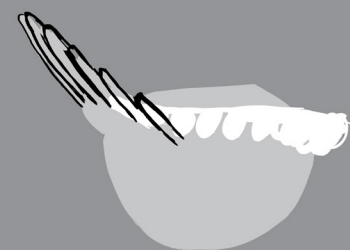




DECK FEATHERS



The bird tail, a nub or small protuberance of muscle which holds the tail feathers.

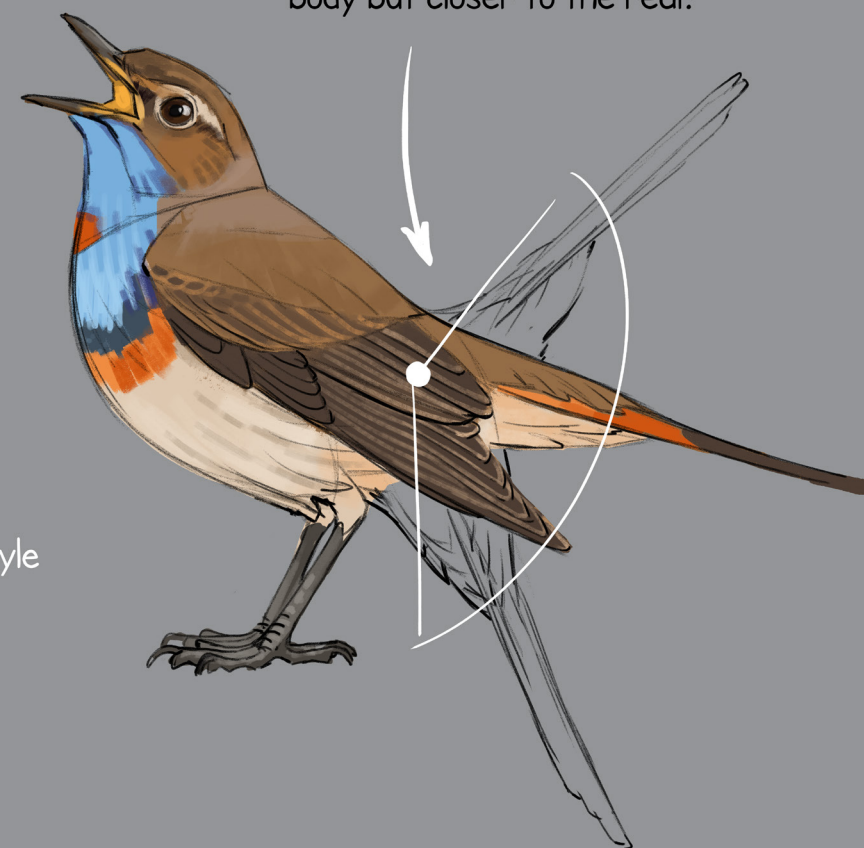


Caudal

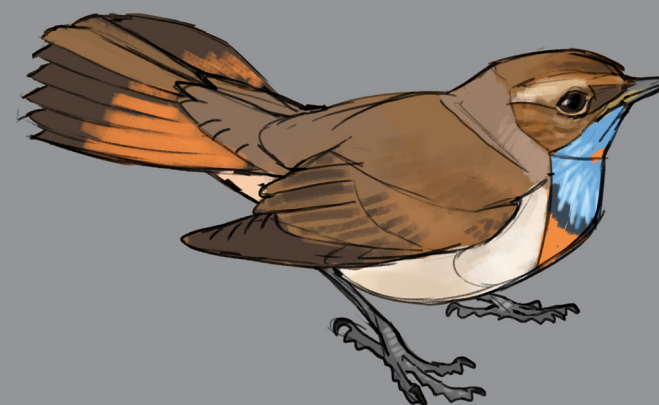
Pygostyle

Feathers

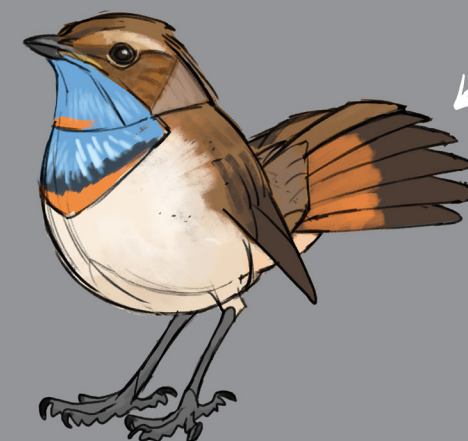
The tail has a lot of movement depending on the bird. It doesn't pivot from the top of the body but closer to the rear.



As well as up and down, the tail can pivot from side to side for steering.

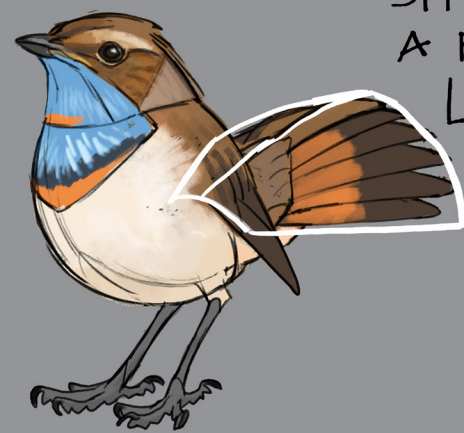


From the side, the tail can be compacted together or slightly apart with gaps seen in between.



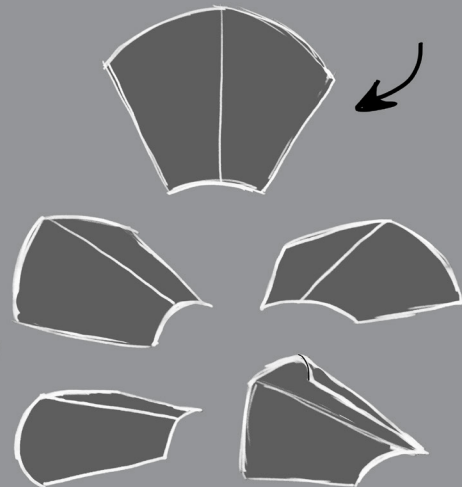
TAIL PERSPECTIVE

Drawing the tail from any perspective is a challenge. Break down the tail into two different shapes and practise drawing it from any angle.

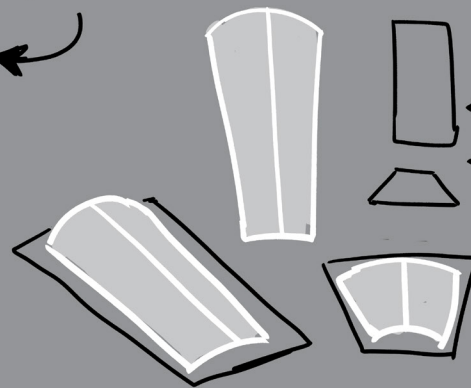


THE TAIL CAN SPREAD LIKE A FAN OR BE LAYERED

CUT THE SHAPE OUT AND USE IT AS REFERENCE TO PRACTISE



THE CLOSED TAIL FROM DIFFERENT ANGLES



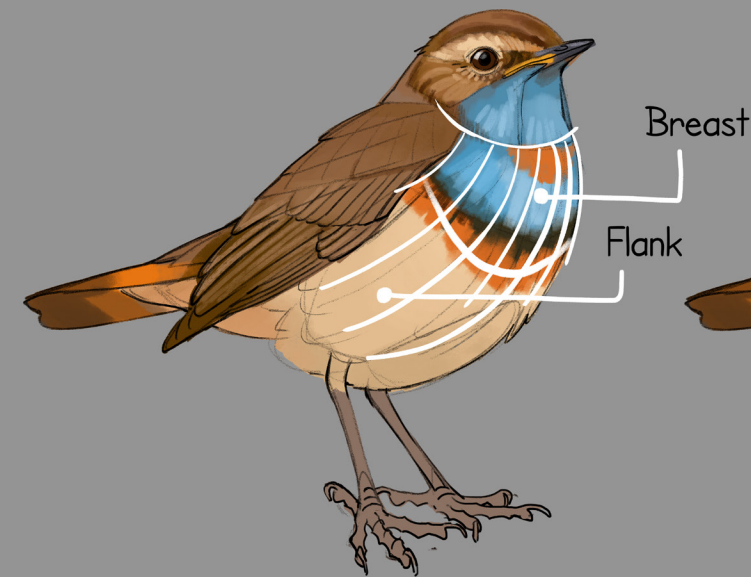
Use the centre of the bird to place the tail



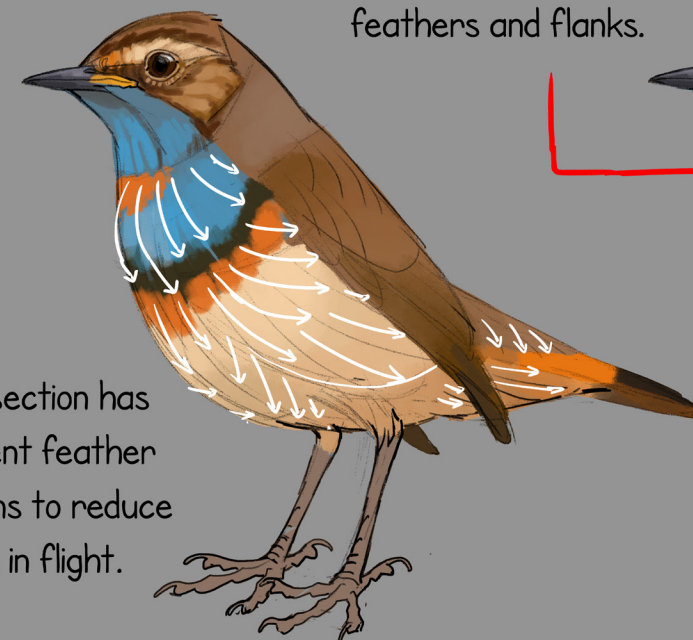
The tail could be invisible behind the bird



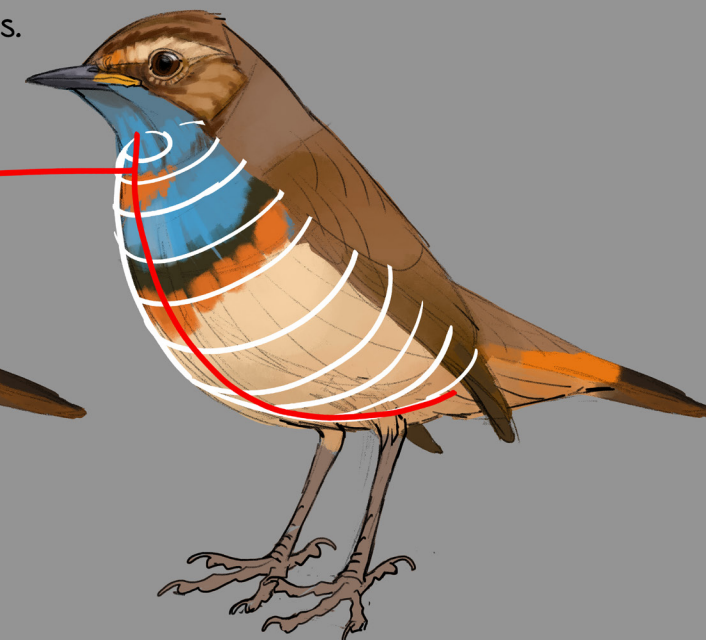
Draw lines to create the flow of feathers. The feathers on the breast are small and sharp with patterns compared to feathers on the flank which become slightly bigger:



Centre line sits between the belly feathers and flanks.

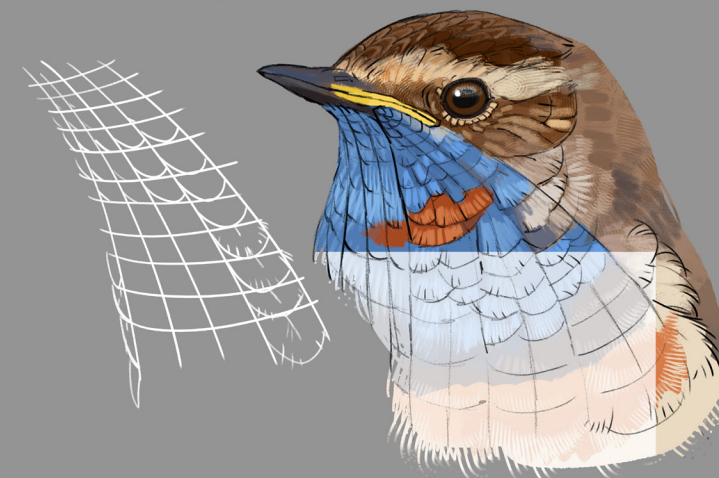


Each section has different feather directions to reduce drag in flight.



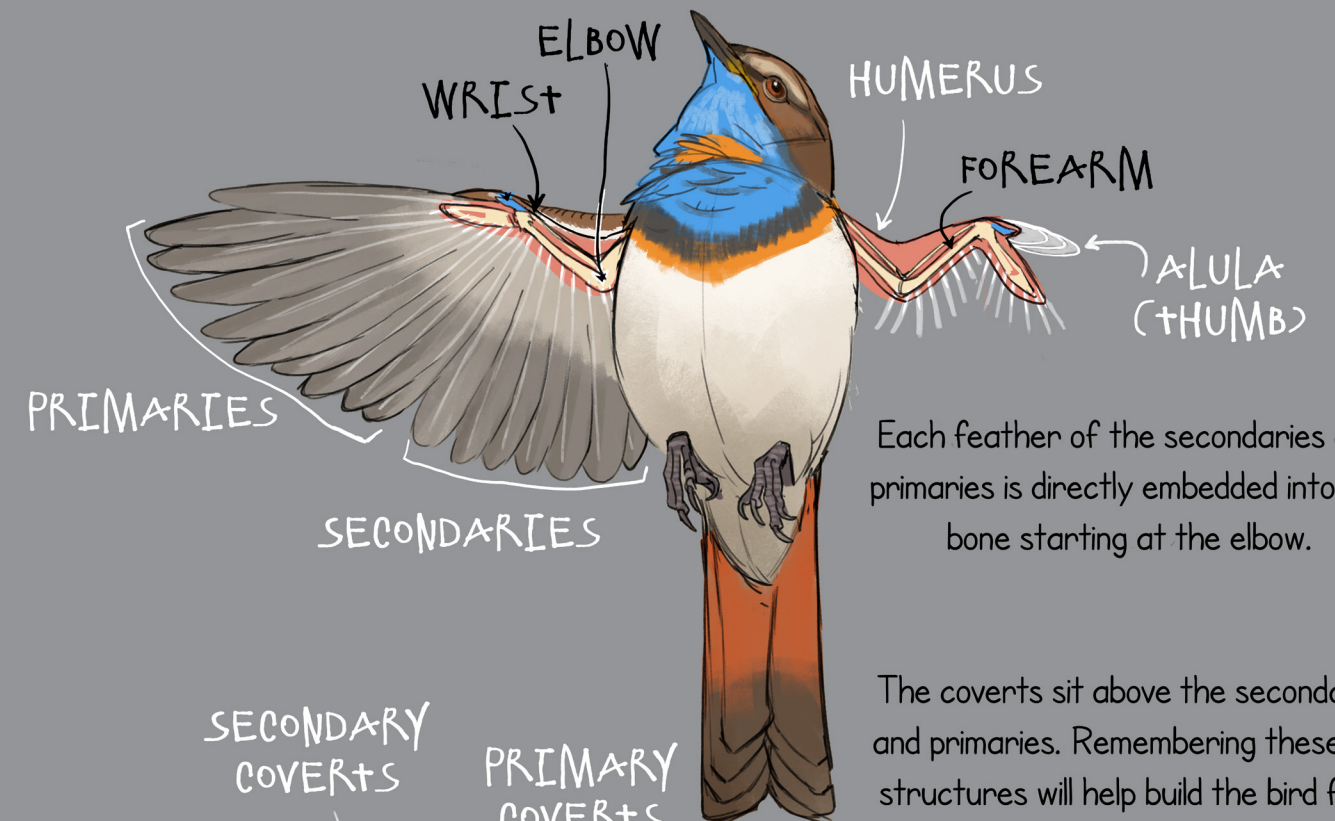
Not all feathers are perfect, some shift in movement and shape.

Try to alter it so it doesn't look like perfect fish scales.



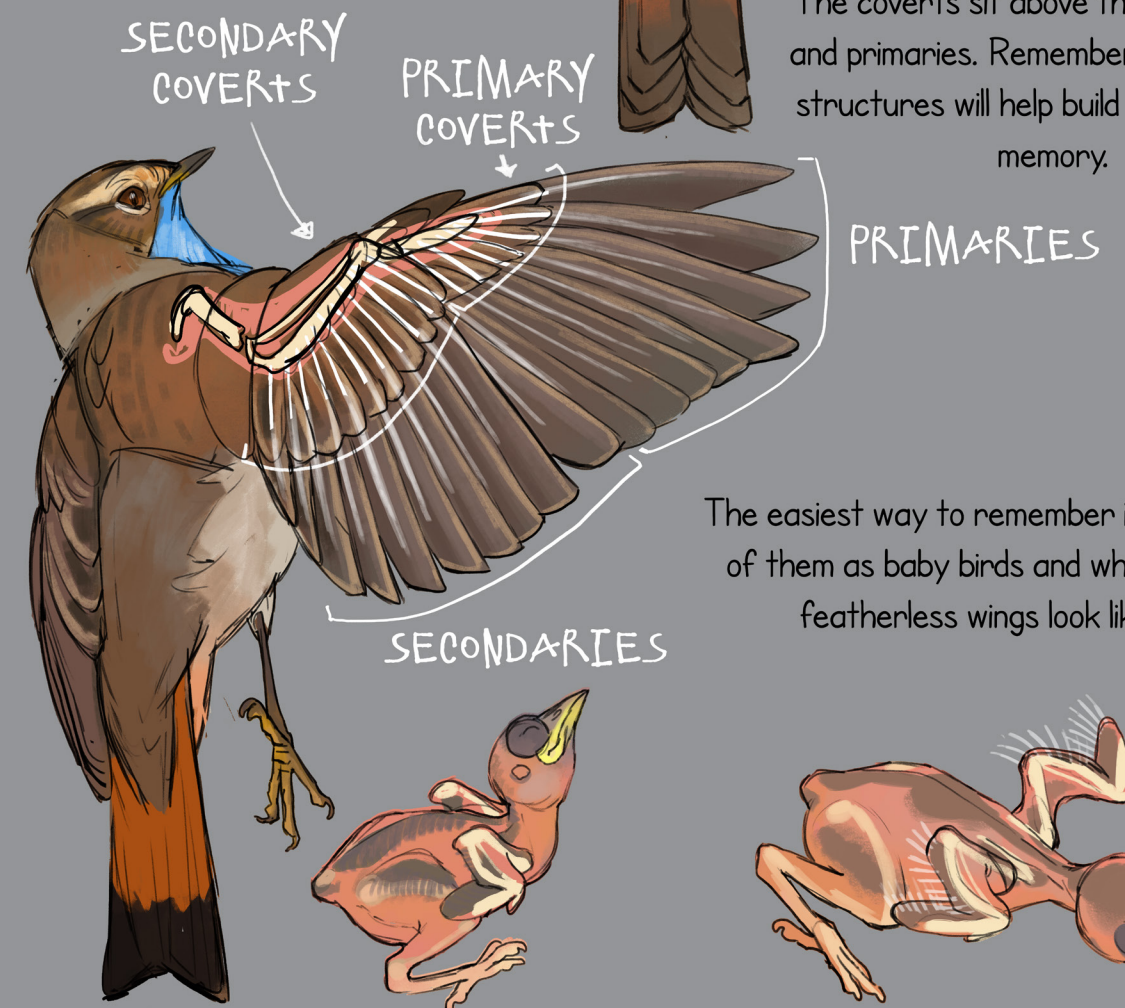
Bird wings: Anatomy

This part covers the basic bird anatomy of the open wing.



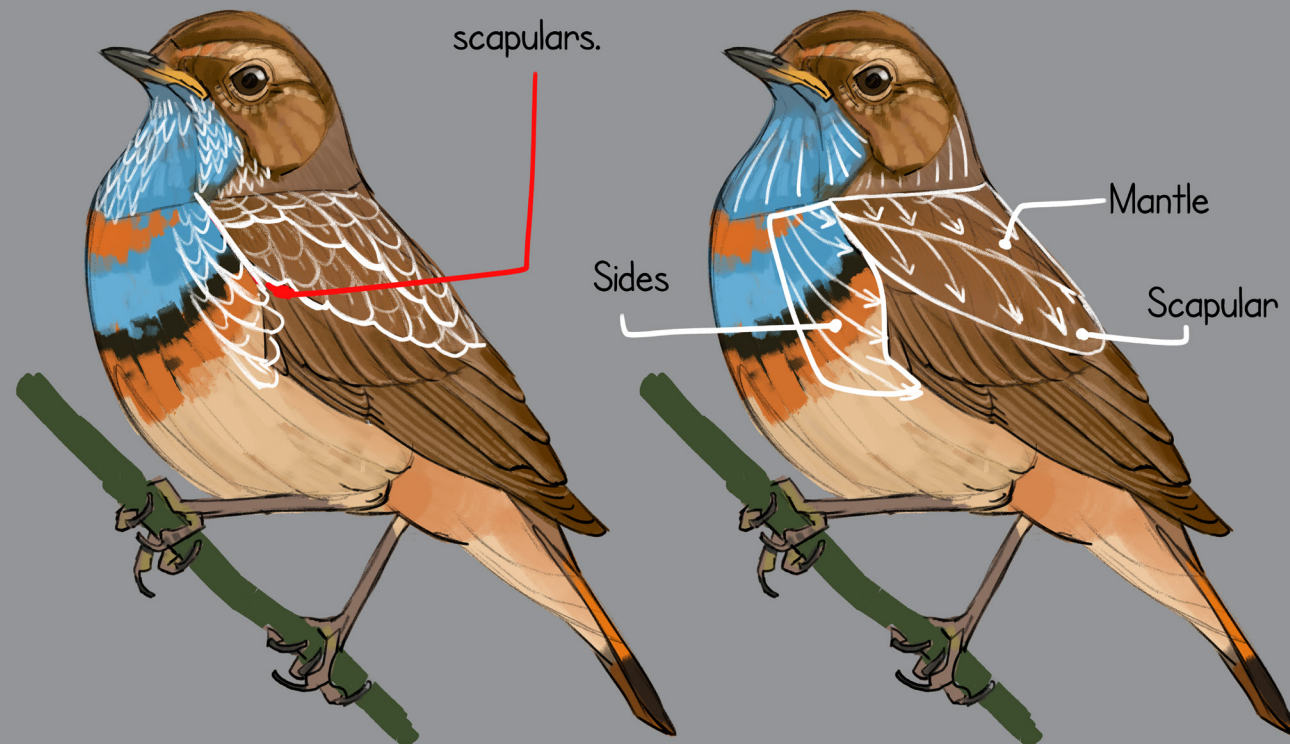
Each feather of the secondaries and primaries is directly embedded into the bone starting at the elbow.

The coverts sit above the secondaries and primaries. Remembering these two structures will help build the bird from memory.



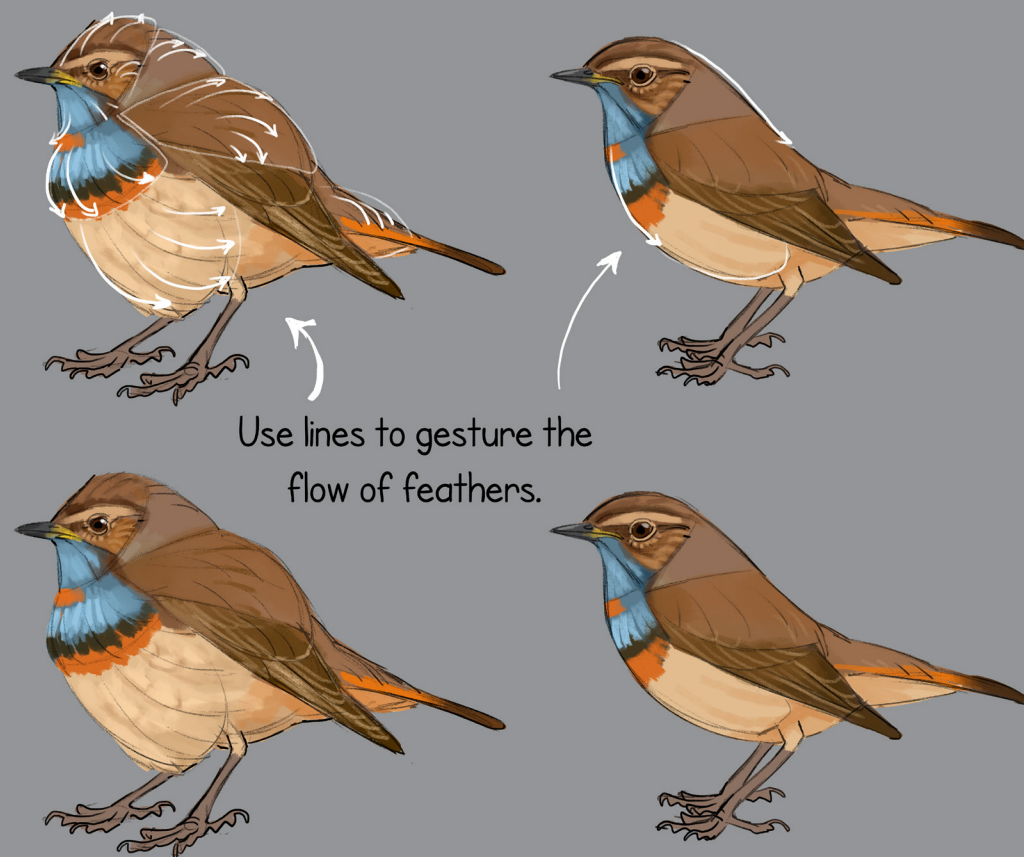
The easiest way to remember is to think of them as baby birds and what their featherless wings look like.

The feathers of the wing are hidden beneath the side feathers and scapulars.



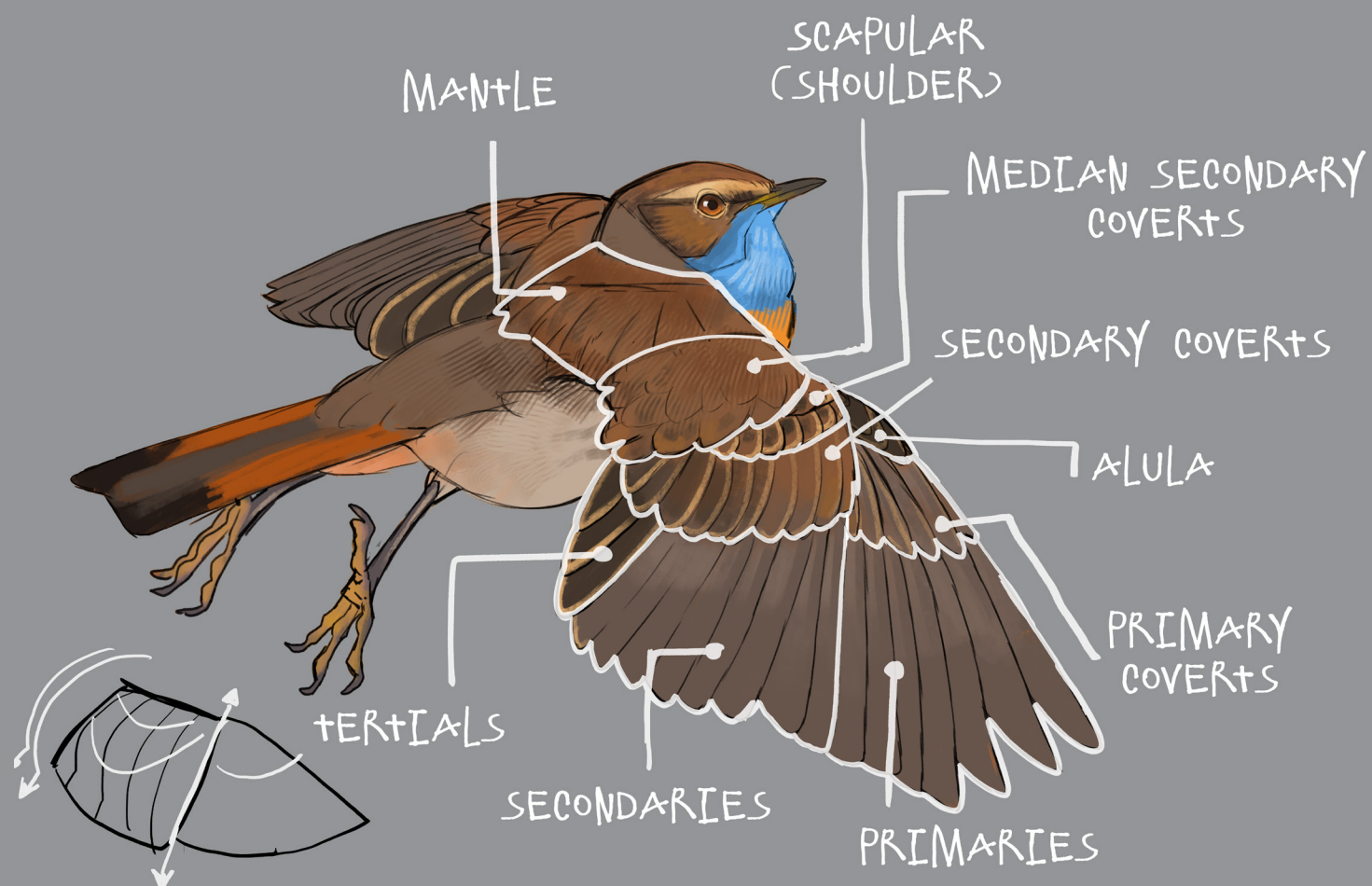
Birds can lift and elevate their feathers to allow air to flow through. This is usually done to "fluff up" their feathers to re-align them, or to allow air between them to keep warm. Sometimes it is done to display aggression or to appear bigger.

Keeping the shapes simple can achieve this effect without getting lost in detail.

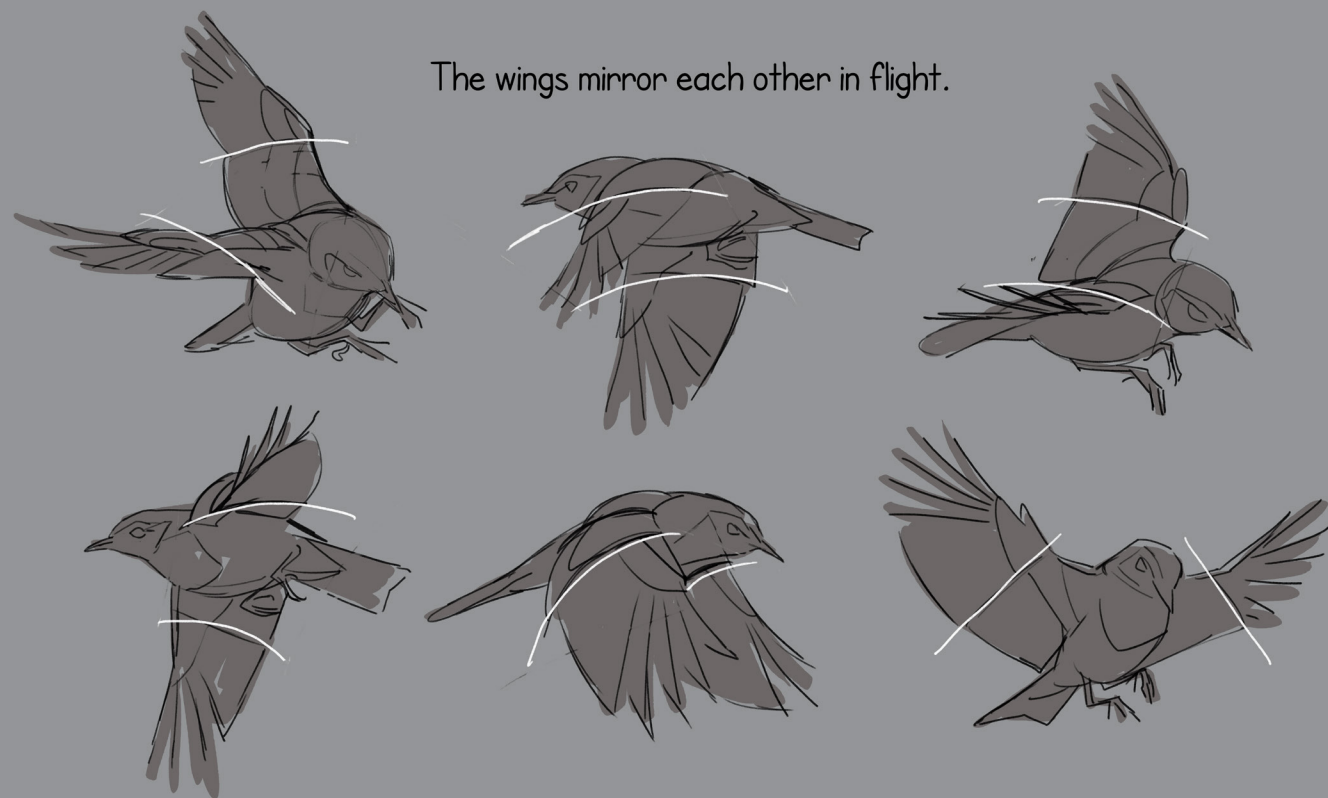


Use lines to gesture the flow of feathers.

Bird wings: Open Wing



The wings mirror each other in flight.



Here is a basic introduction to flight and how it is important to learn so that your wings look realistic and believable when drawing.

Birds are in a constant battle of fighting gravity. The wings are not flat and don't have a simple up and down motion to create lift. The wings are tilted up towards the air flow.*

Feathers separate and turn on the upstroke so air can pass through for less resistance.

Downstroke creates a firm boundary so air can't pass.



Secondaries curve to decrease resistance.



The wing uses an elliptical sweep to decrease resistance.

Draw the wing in separate parts. The wing can break between primary and secondary to provide thrust.

Small lift

Airflow clings to surface

Flying this way

No lift

Lift

Turbulence

Stall

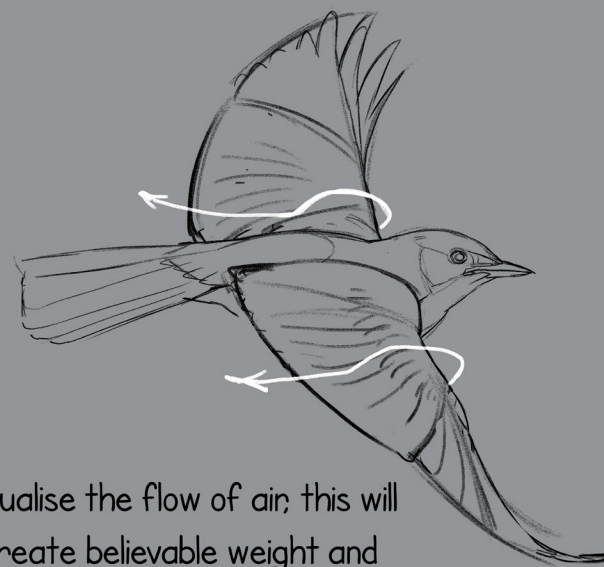
Put your hand flat in front of a fan and tilt it up



Different types of feathers on the bird.



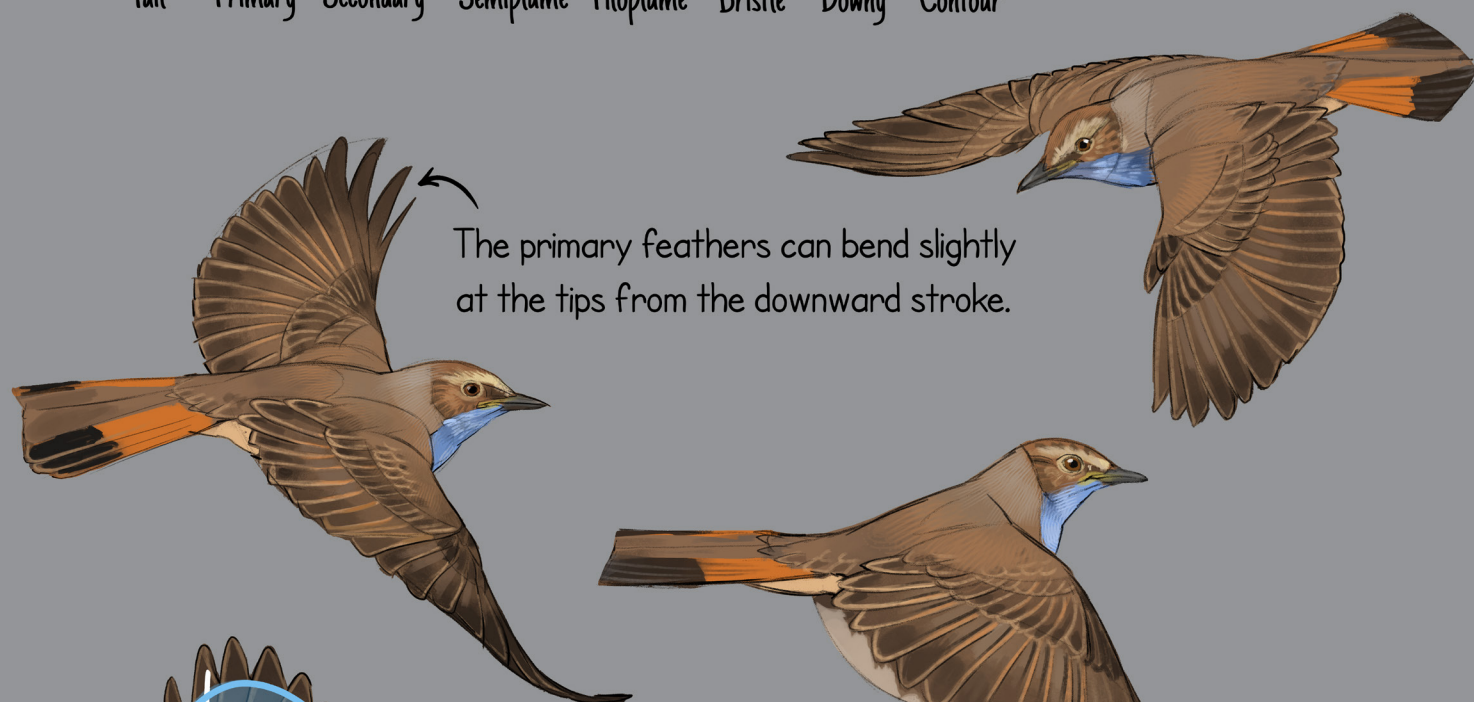
Using a custom brush to recreate the contour feathers or draw them by hand in rows.



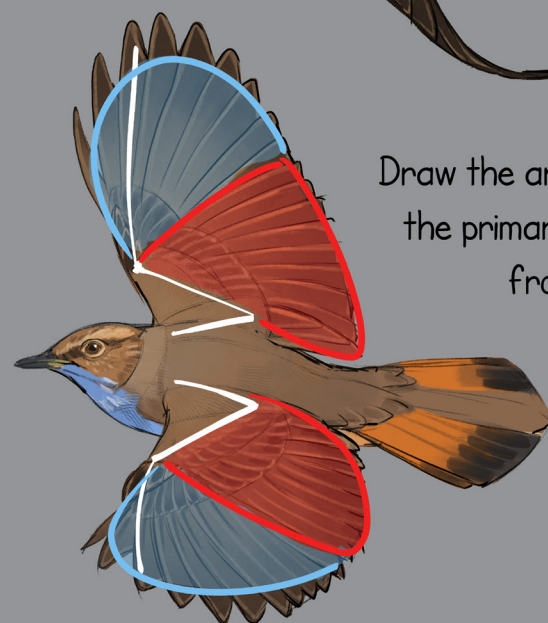
Visualise the flow of air; this will create believable weight and motion when placing your wings.



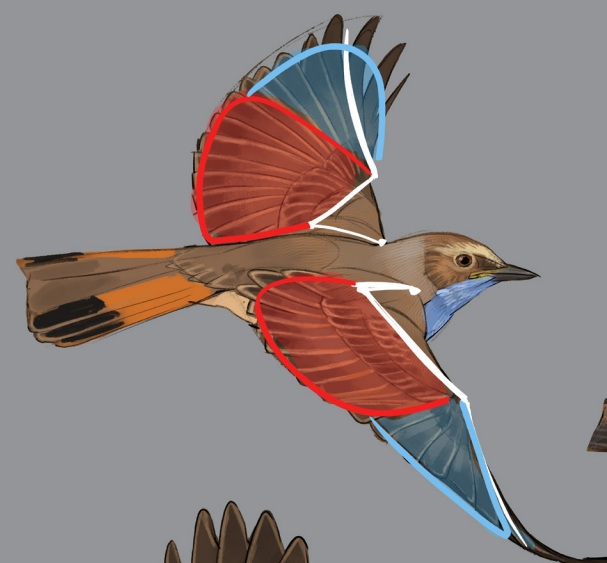
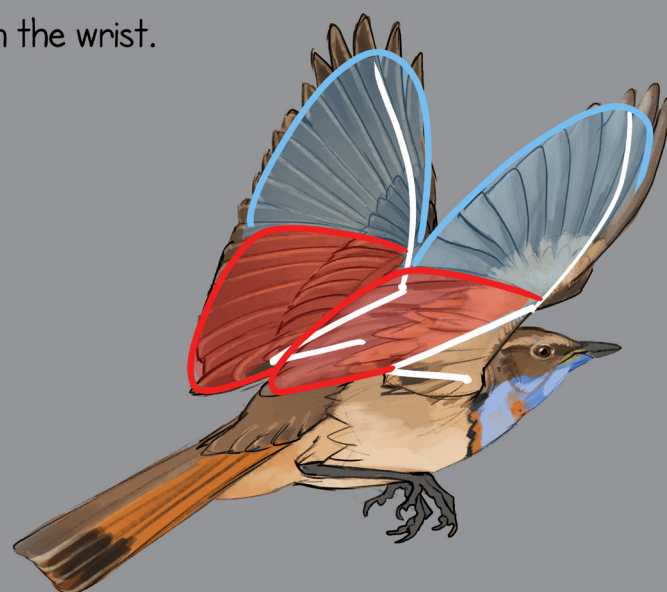
The bird is constantly battling air from above and below.



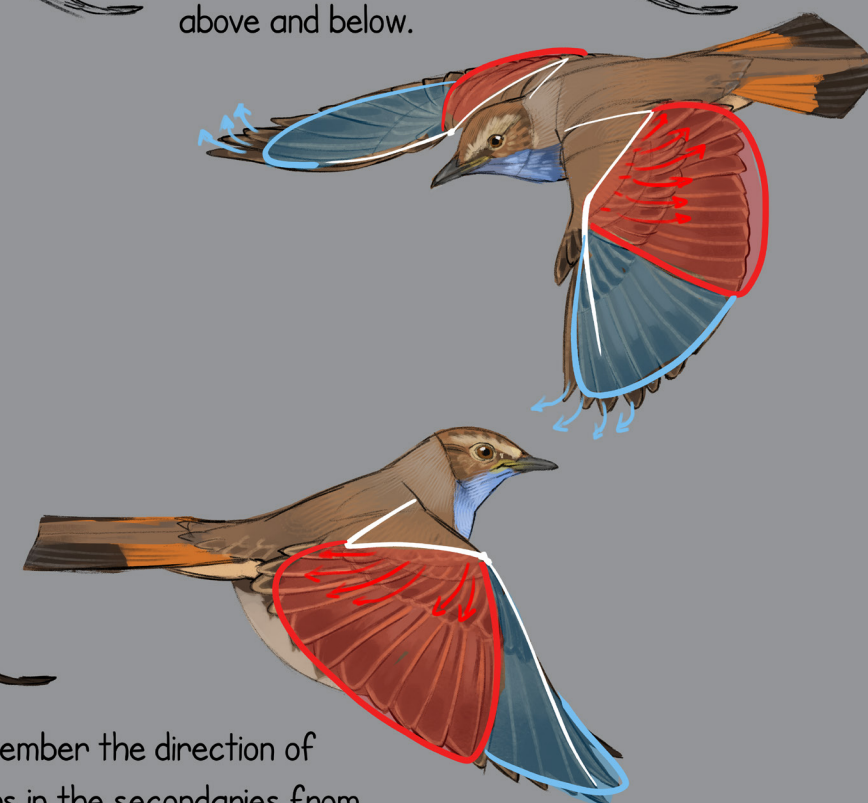
The primary feathers can bend slightly at the tips from the downward stroke.



Draw the arms first then position the primaries and secondaries from the wrist.

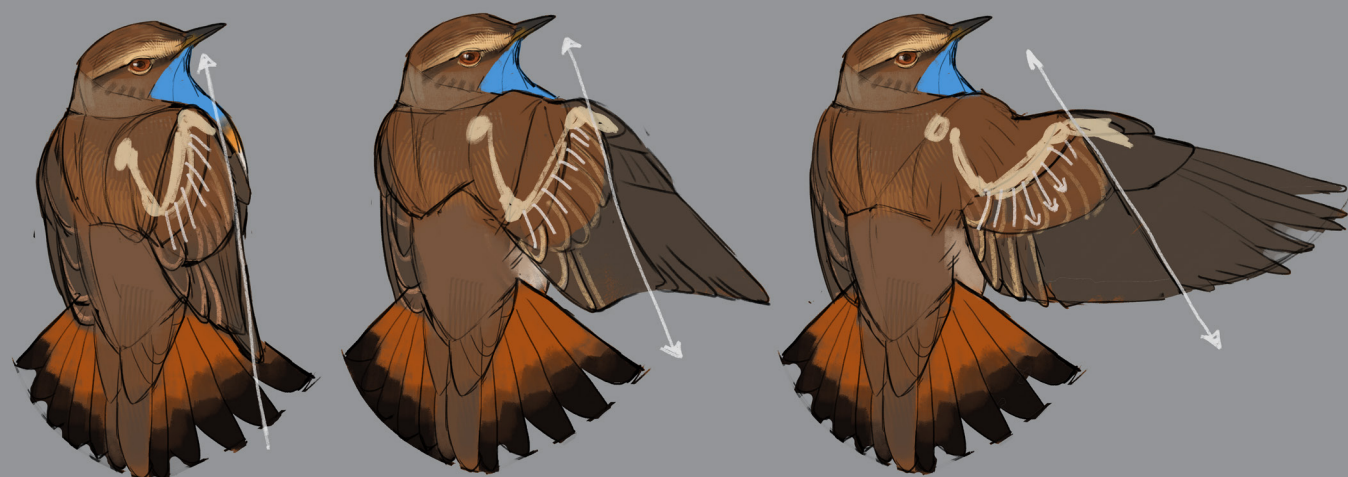
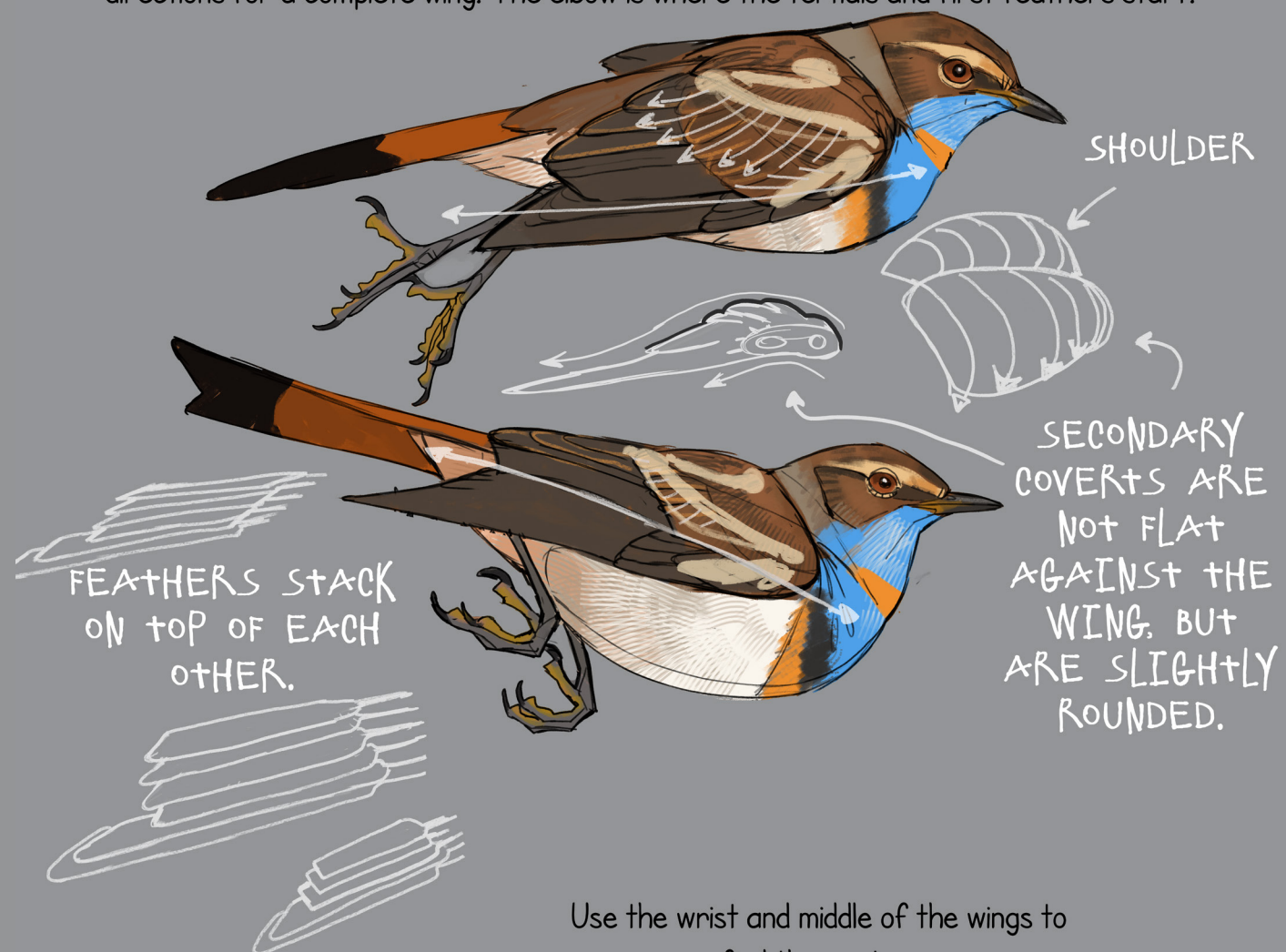


Remember the direction of feathers in the secondaries from the arm fanning out towards the body.

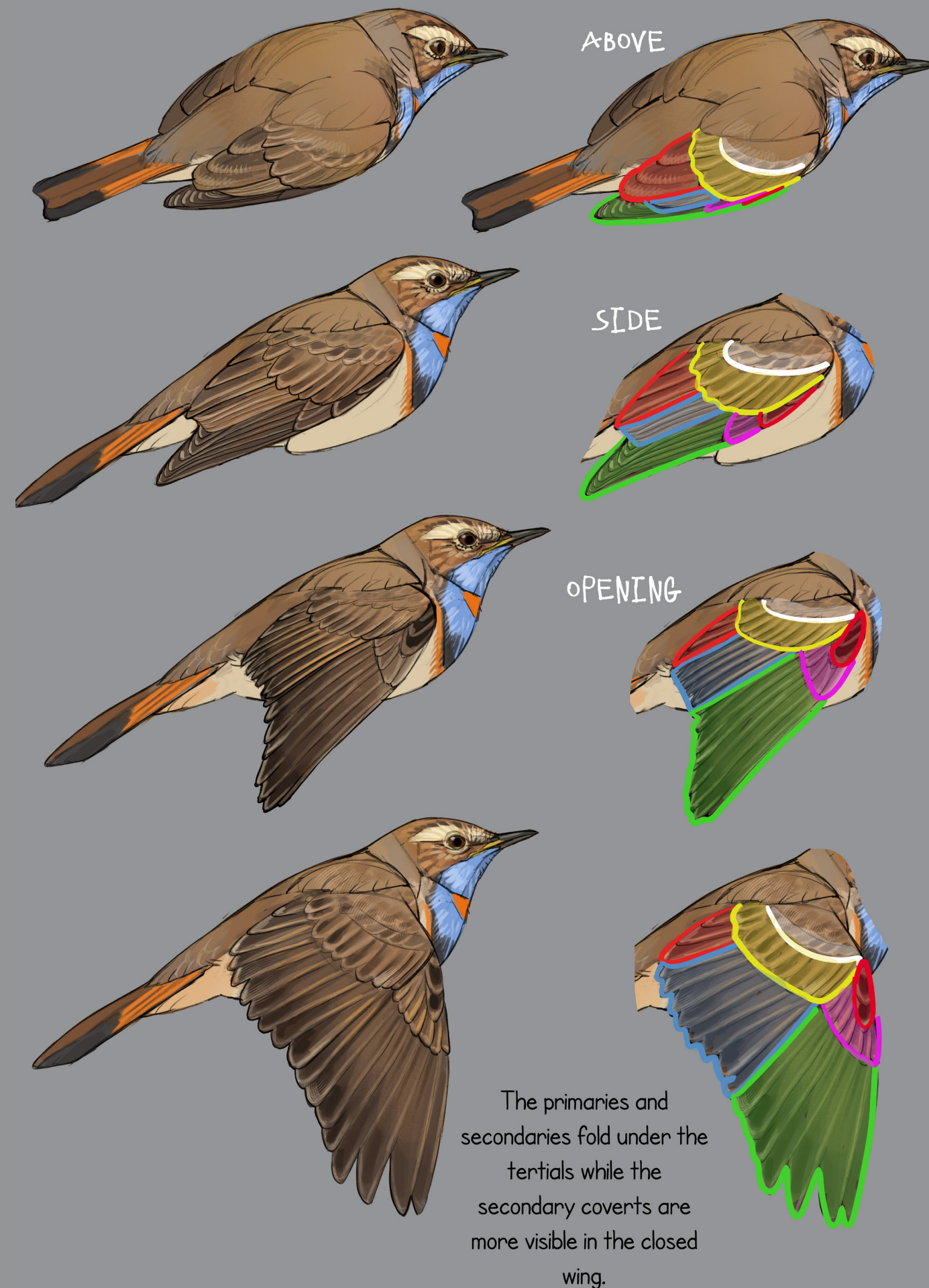


Bird wings: Closed Wing

Using the technique with splitting the wing into two parts, the secondary section sits on top of the primary. It's important to remember the arm in order to draw the feather directions for a complete wing. The elbow is where the tertials and first feathers start.

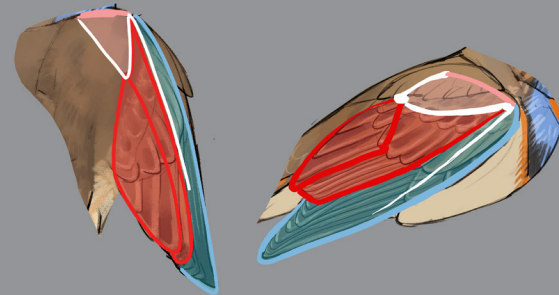


The closed wing is difficult to learn, by practising and drawing each section will help memorise exactly where the feathers overlap.

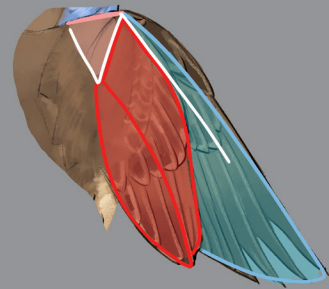


Bird wings: Flight and Flightless

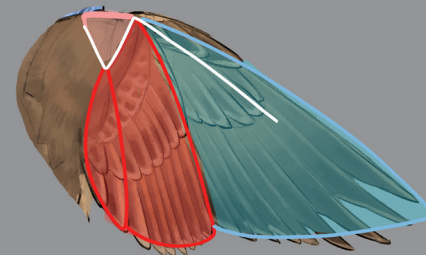
A top view of the wing shows the tertials sat on top of the **secondaries** and then the **primaries** below that at the bottom.



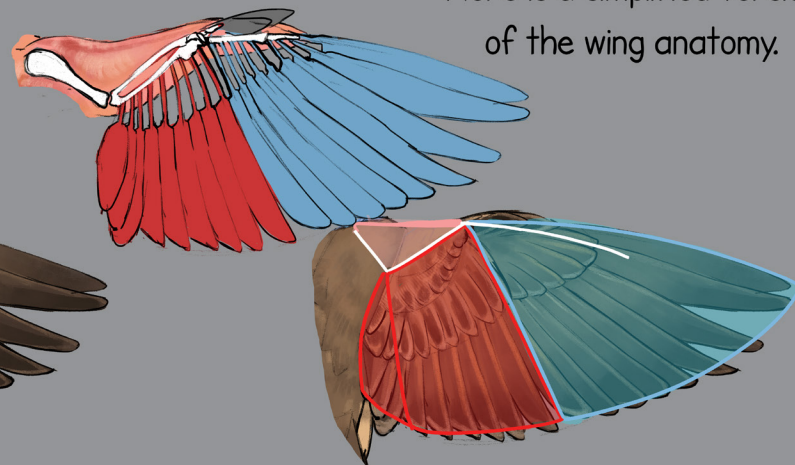
As the wing opens, the coverts become more visible.



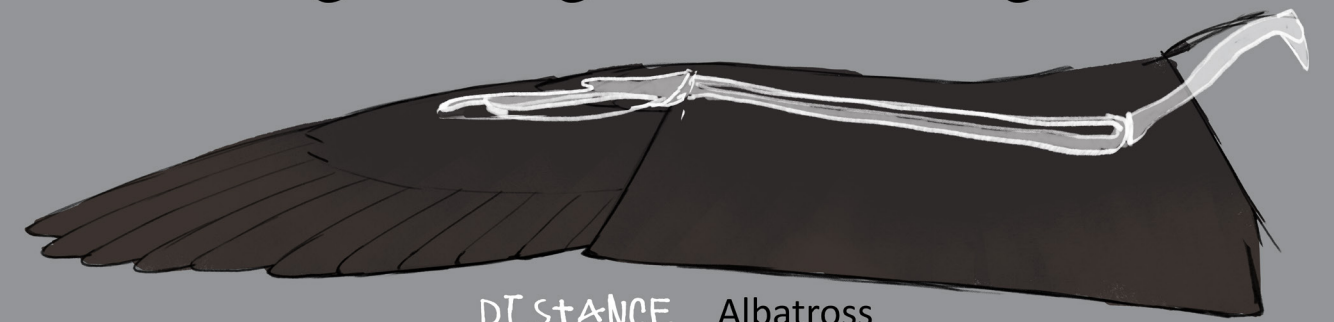
The white line is a guide for the arm structure. This will make it easier to pose the wing from any angle.



Here is a simplified version of the wing anatomy.



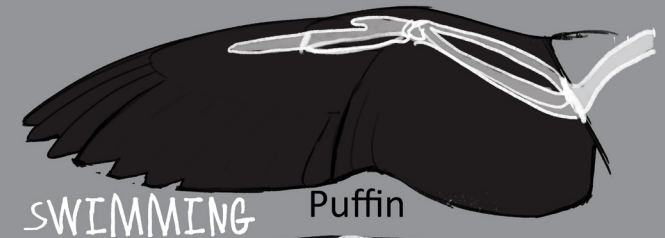
Remember the direction of the feathers from the bone.



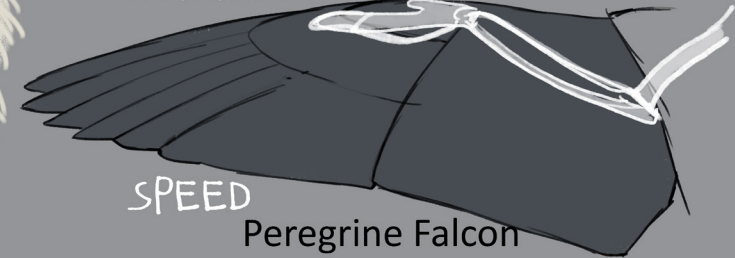
DISTANCE Albatross



Ostrich



SWIMMING Puffin



SPEED Peregrine Falcon



SOARING Vulture



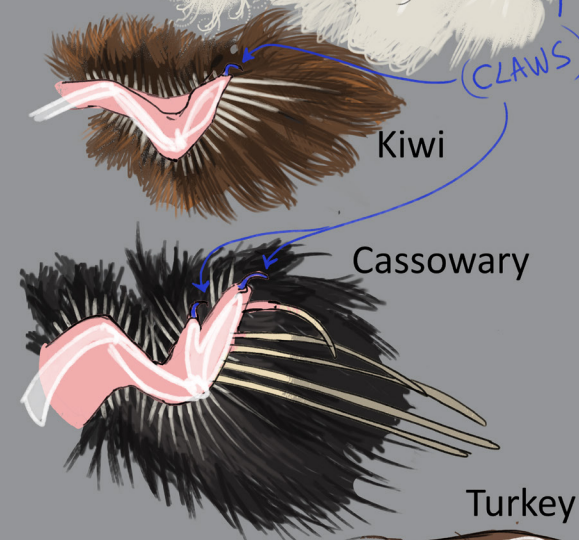
SHORT FLIGHT Toucan



SPEED Swift



HOVERING Hummingbird



Kiwi

Cassowary

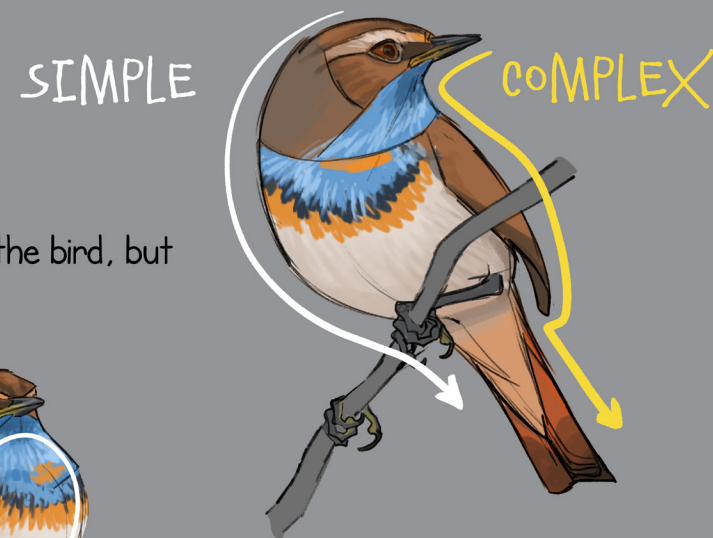


Turkey

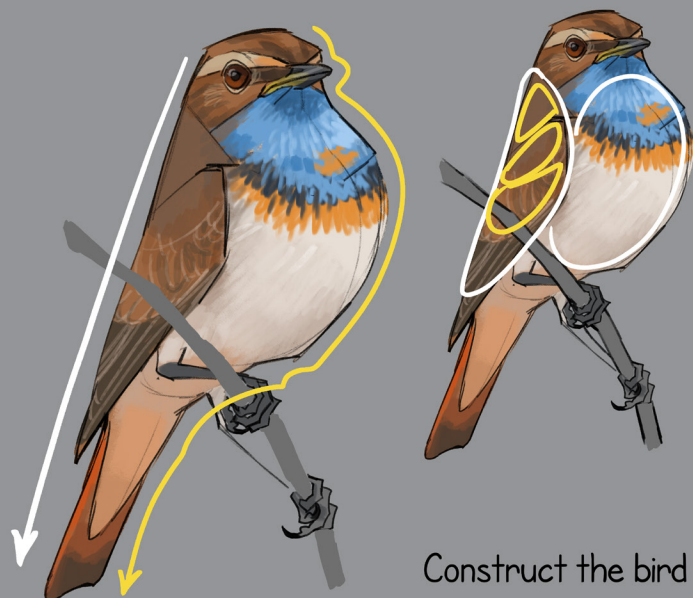
BURST AND SHORT FLIGHT

Simple and Complex

The idea of simplifying a side can create the illusion of action or animation in the bird while the complex side draws in the viewer's eyes.

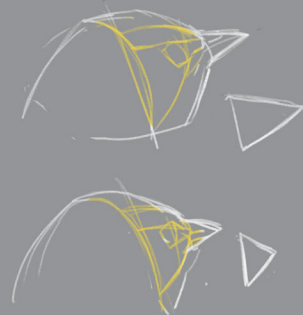
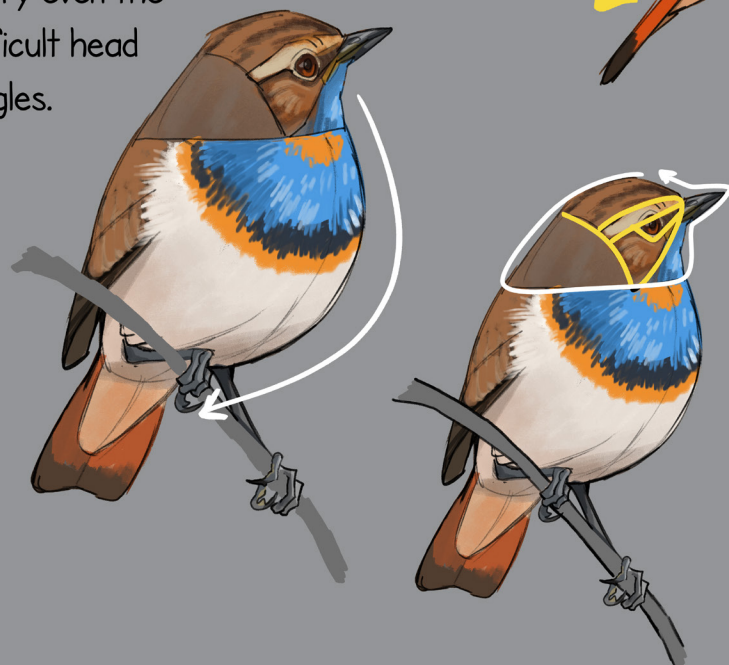


This doesn't just apply to the silhouette of the bird, but also other elements.



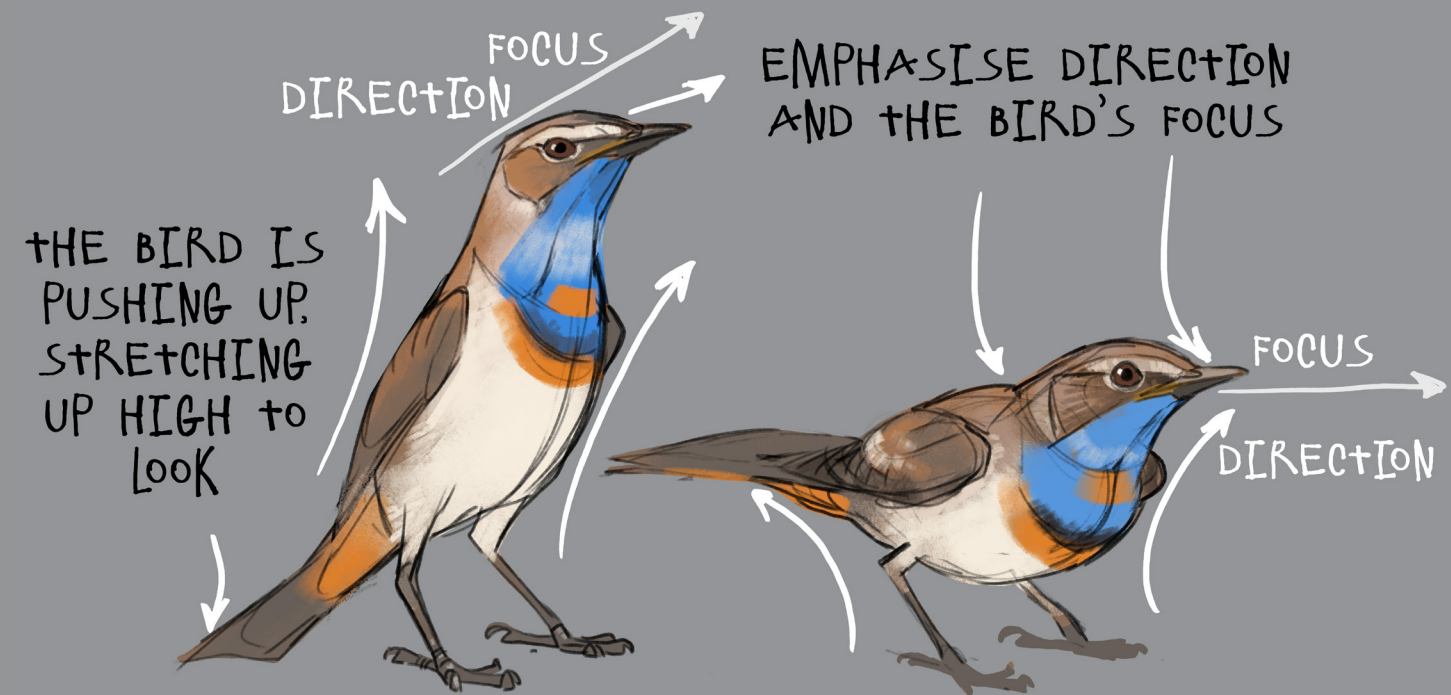
Construct the bird with simple and complex shapes before adding detail.

It will simplify even the most difficult head angles.



Squash and Stretch

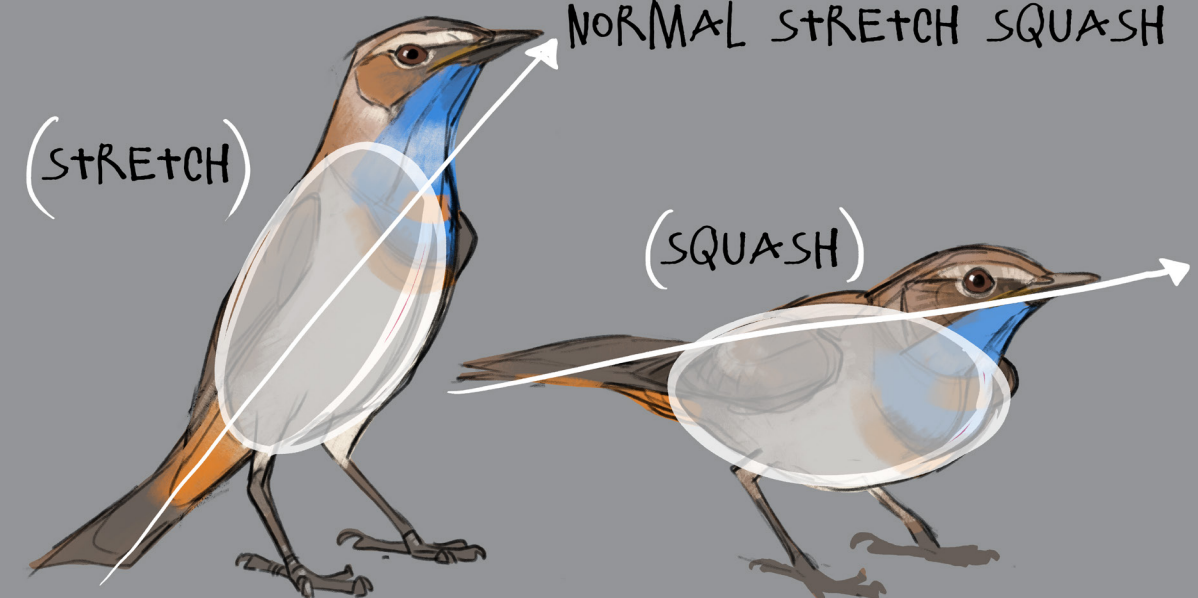
Squash and stretch is an important drawing technique to give your subject purpose, emotion, action, motion, character, story etc. When you're telling a story or creating an illustration, it's important to have your subject interact with its environment around it.



TAIL STRETCHED SHOWS TENSION



NORMAL STRETCH SQUASH



Silhouette: composition

Positive and negative space is an important part of composition; it creates balance and rhythm of the subject and gives strength to the design.

POSITIVE

The area where the subject is.

NEGATIVE

The area surrounding the subject.

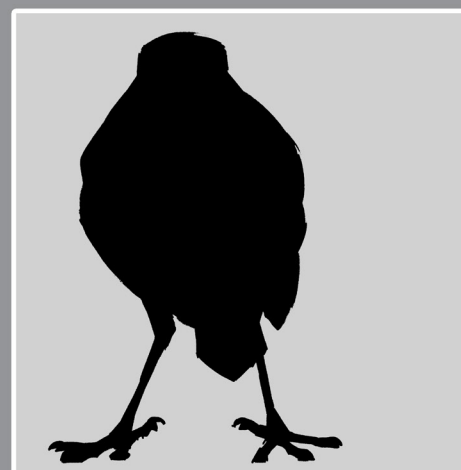
CONSIDER THE NEGATIVE
SPACE AROUND THE SUBJECT.



More negative space between limbs shows a clearer picture
rather than it looking too busy.



GOOD



STRONG

Observing the negative space and drawing these shapes first can be
easier than concentrating on getting the subject
perfect.

