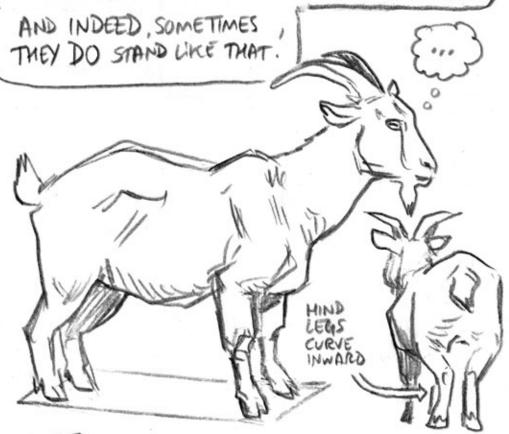
# ANIMALS STANDING

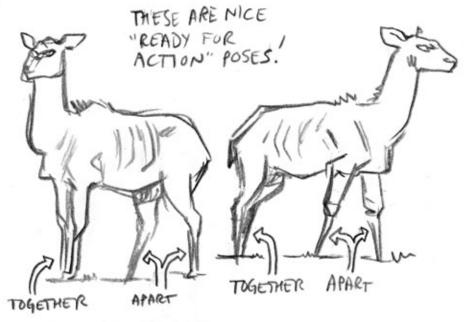
WHEN WE DRAW ANIMALS IN STANDING POSES, IT'S NATURAL FOR US TO POSITION THEM IN A "FOUR-SQUARE" STANCE, WITH THEIR LIMBS LINED UP LIKE TABLE LEGS...

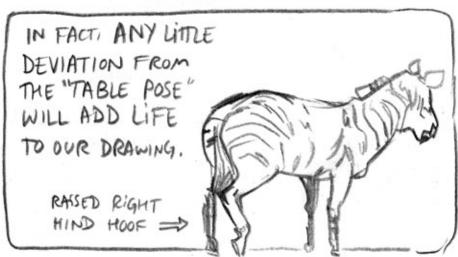




I FEEL THIS GIVES THEM A
THOUGHTFUL, DISTRACTED LOOK
-- LIKE THEY'RE TRYING TO
REMEMBER A MOVIE PLOT.

HOWEVER, WHEN FOUR-LEGGED MAMMALS
PAUSE IN THE MIDDLE OF THEIR WALKING
PROCESS - FOR EXAMPLE, WHEN HERBIVORES
ARE GRAZING -- THEY OFTEN SHIFT THEIR
FEET SLIGHTLY, SO THAT ONE PAIR ARE
TOGETHER AND THE OTHER PAIR APART.





# MIMAS WING DWA



LYING DOWN, WE TEND TO IMAGINE THEM SITTING STRAIGHT UPRIGHT.



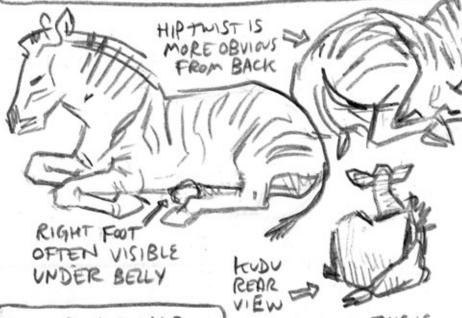
ONCE AGAIN,
THIS DOES
HAPPEN -ESPECIALLY
WITH BIG
CATS. BUT.



THEY SEEM MORE COMFORT-ABLE WITH THEIR HIPS TURNED SIDEWAYS.

OR EVEN THE WHOLE BODY!

THAT MIDDLE POSTURE - FRONT OF BODY UPRIGHT, HINDQUARTERS TURNED ONTO THEIR SIDE -- IS TYPICAL OF MOST FOUR-LEGGED MAMMALS, EVEN LESS FLEXIBLE ONES.



HOUFED ANIMALS
WILL OFTEN BEND
THEIR FORELEGS
TO TUCK IN THEIR
FRONT HOOVES.

CHARLES KNIGHTS
"ANIMAL DRAWING"
HAS A WHOLE CHAPTER
ON LYING DOWN! HE
POINTS OUT THAT,
WHILE HORSES AND
THEIR KIN SIT DOWN
BOTTOM FIRST -



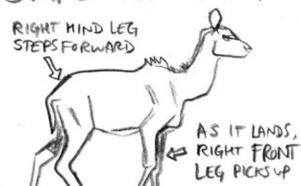


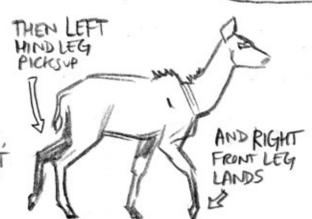
## ANIMAIS WALKING

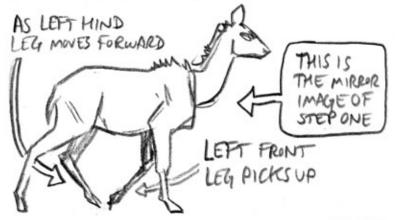
STANDARD WALK

A QUICK INTRODUCTION TO SOME COMMON GAITS USED BY FOUR-LEGGED MAMMAIS-FOR USE AS POSE REFERENCE!







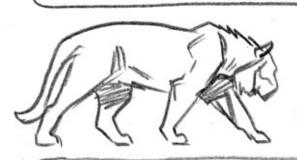


THIS GAIT-DEMONSTRATED HERE BY A GREATER KUDU-IS WIDELY USED BY ALMOST EVERY LARGE FOUR-LEGGED MAMMAL (EXCEPT GIRAFFE!)

PACING

IN THIS GAIT, THE LEFT LEGS STRIDE FORWARD IN UNISON, AND THEN THE RIGHT LEGS.,
IT'S A POWERFUL, PURPOSEFUL MOTION!

TROT IS LIKE A FASTER VERSION OF THE WALK, IN WHICH THE "INSIDE" LEGS LIFT WELL CLEAR OF GROUND.







TMIS IS A MIRROR IMAGE OF STEP ONE

THIS IS THE STANDARD WALKING GATT OF GIRAFFES, CAMELS, AND THEIRKIN ... AND BIG CATS USE IT TO MOVE BRISKLY OVER LEVEL GROUND.

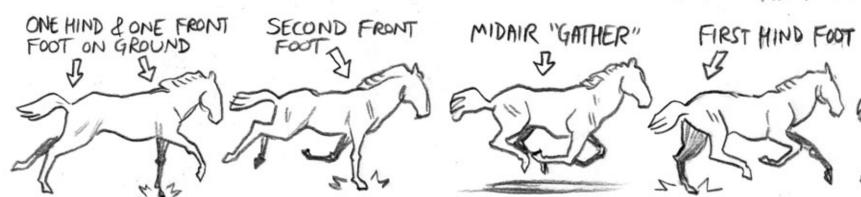
# MIMALS RUNNING



NOT QUITE AS USEFUL FOR LIVE SKETCHING SINCE THE MOVEMENTS ARE SO FAST...

### HORSE GALLOP

THE BASIC PRINCIPLE HERE IS THAT THE FRONT FEET HIT GROUND ONE BY ONE, THEN THE TWO HIND FEET, ETC ETC.



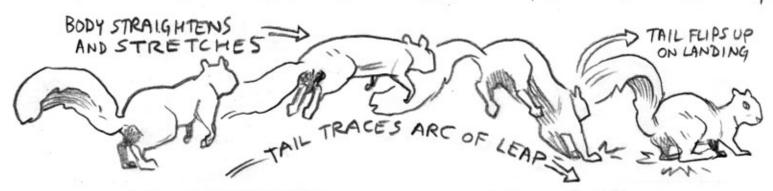
JACK LAWS NOTES THAT SOME MAMMALS. DOGS, CATS, DEER, ETC. USE A "ROTARY" GALLOP WHERE FEET HIT GROUND IN SLIGHTLY DIFFERENT ORDER. (MAYBE NOT SO IMPORTANT FOR SKETCHING.)



THIS SEQUENCE ALSO HAS A MIDAIR "EXTENDED" PHASE NOT SEEN IN HORSES.

### SQUIRREL HOP

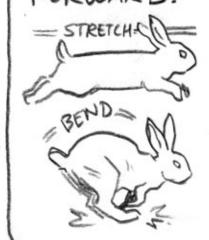
AS FRONT PAWS HIT GROUND TOGETHER, HIND FEET SWING FORWARD FOR LANDING.



#### BUNNY HOP

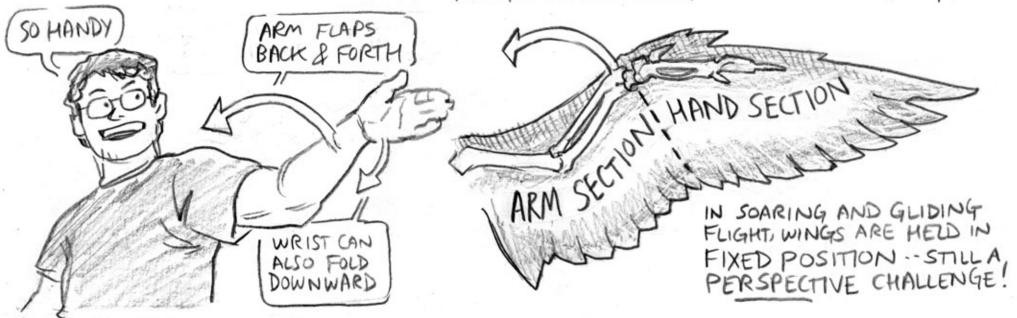
SECOND HIND FOOT

RABBIT JUMP IS SIMILAR TO SQUIRRE, BUT HIND FEET LAND FURTHER FORWARD.



### BIRD WINGS

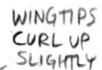
ARE MODIFIED ARMS, WITH SECONDARY FLIGHT FEATHERS ATTACHED TO FOREARM, AND PRIMARIES TO HAND. FLAPPING FLIGHT IS BASICALLY JUST LIKE CLAPPING.



#### FLAPPING SEQUENCE MAY BE MORE OR LESS VIGOROUS!



BECAUSE WING MOVEMENT SLOWS DOWN AT TOP & BOTTOM OF STROKE, WE OFTEN PERCEIVE A "DOUBLE EXPOSURE" OF THESE TWO POSITIONS







WINGS REMAIN BENT DURING UP STROKE, ONLY STRAIGHTENING AT TOP OF STROKE



BUT DOES THIS HELP US DRAW BIRDS IN MID-FLIGHT??

