



animals in motion

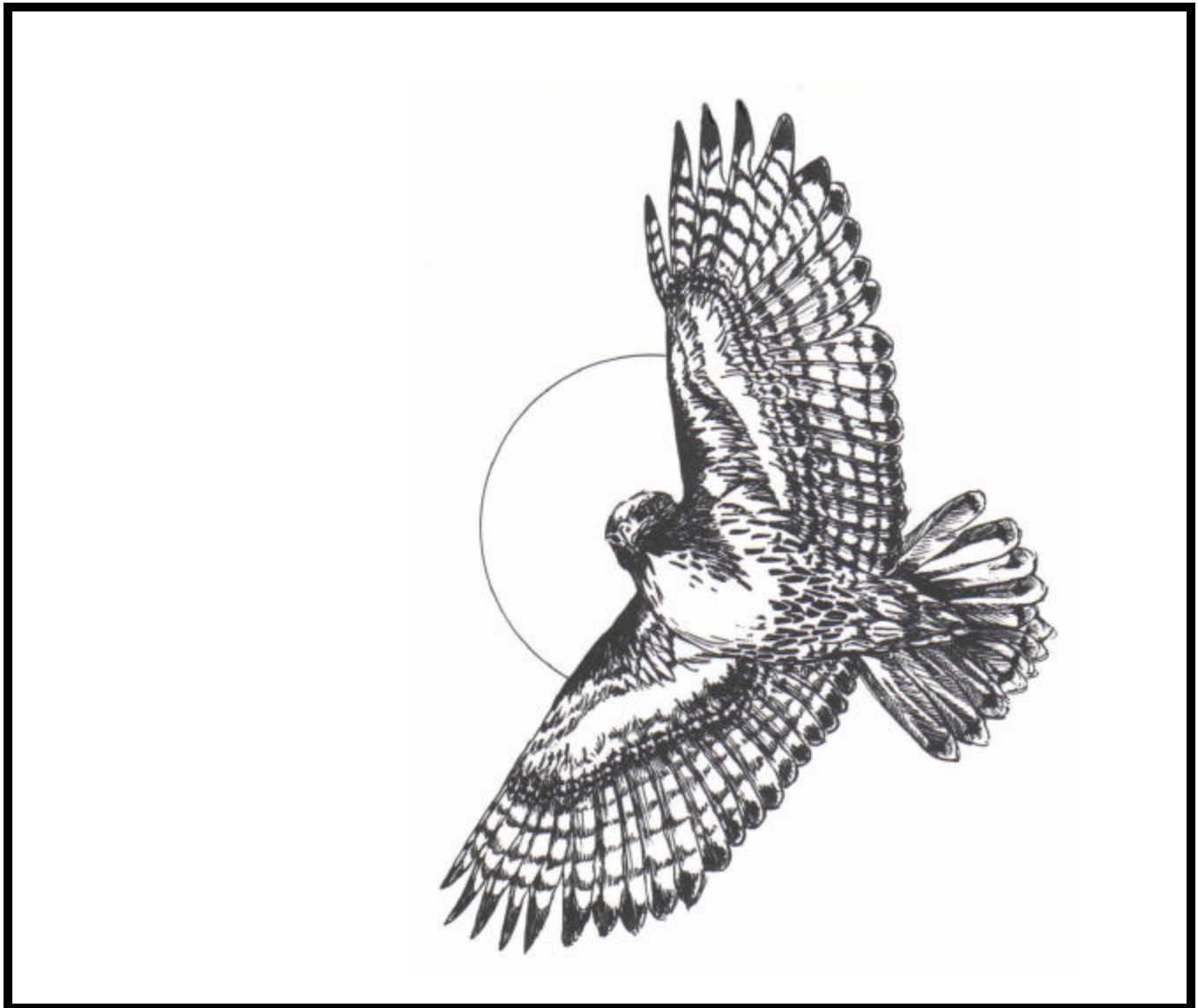
an introduction to capturing action in the wild



What makes a flat piece of paper come to life with more action than a herd of stampeding wildebeest?

How do you make those wildebeests look like they're stampeding? How do you make the hawk look like it's flying, an otter look like it's about to swim off the page?

Here are a few ideas...



Those two hawks are exactly the same drawing. the one at the top of the page is "static", very still, dead in the water, er, air. It is dead centered in its box, the whole bird is symmetrical; the same on both sides.

The bottom hawk is off to the right, as if it is flying into the picture. It's tilted, as if wheeling on the wind, as if you just caught it with your camera as it turned. Off center, not level, uneven; these make it look like it's in motion.

The horse and raven on the cover are also not centered. the horse's front end is raised a little, as if he's caught in mid-stride, leaping forward again. His background is splashy, blurry, as if he's moving too fast for you to see the trees clearly.

Below is a pen and ink drawing of my mustang mare, Lor, as I imagine she was in the high desert of Oregon where she came from. At first, there doesn't seem to be any motion

here. Look carefully; there is tension in her watchful stance, the radar ears, the intent eyes, watching, waiting, wondering if you are dangerous. If she decides you are, she will flee in a thunder of hooves. I showed some of this tension with the wild mane and tail, the glowing eyes (they do glow in the dark), and the sharp, angular skein of geese cutting across the moon in the background.



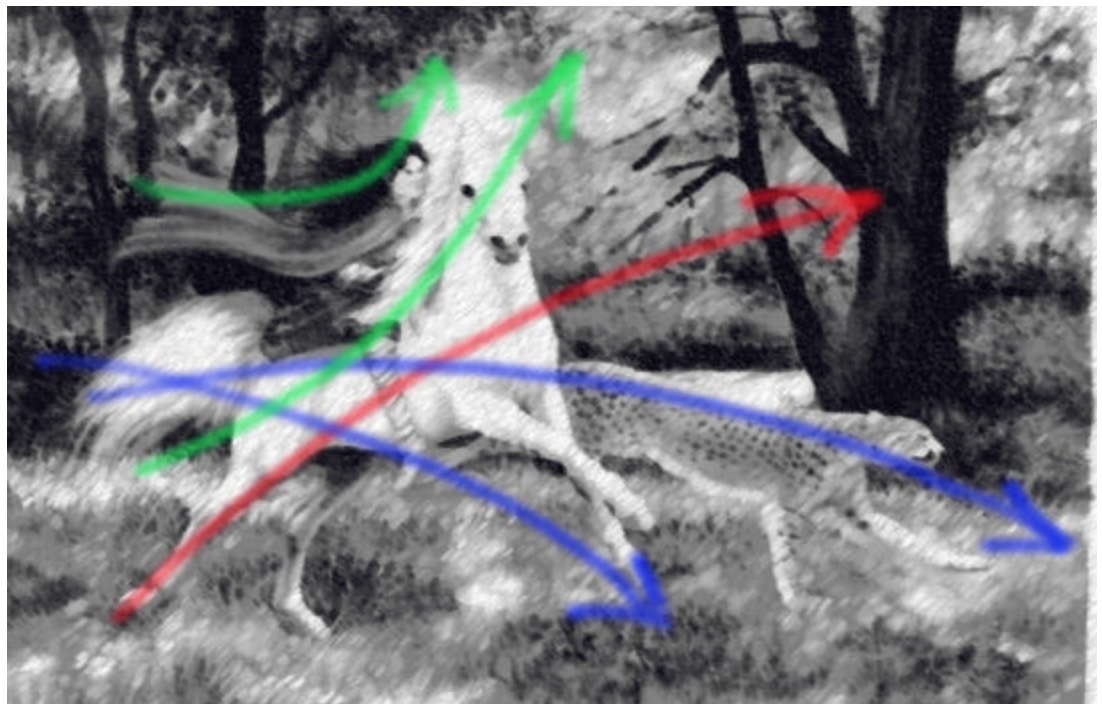




I painted the original "Twilight Run" in water-color with everything in focus (above). Right; I've drawn in lines of motion: the leaping horse and running cheetah make flowing shapes with bodies and legs, shapes like

ocean waves, curved shapes that feel like movement.

On the other page, I've done



two different computer effects on Twilight Run; which make the picture look as if a camera caught the action blurring by.

You can do the same thing with a camera (panning with the action) or a sketch or painting (making the edges



blurry or streaked). This design for a bookcover is a montage of many images, and while some of them are very quiet and still (the watching wolf) others are in motion; the raven in flight, and the raven head and raven wing that are part of the kung-fu move the main character is doing.

Look for the same curving, sweeping lines that Twilight

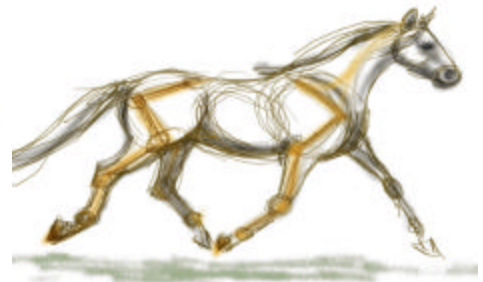


Run has...

Notice how some of the lines are angular, sharp; the flying

raven's bent leg and the main character's arm doing the raven beak strike.

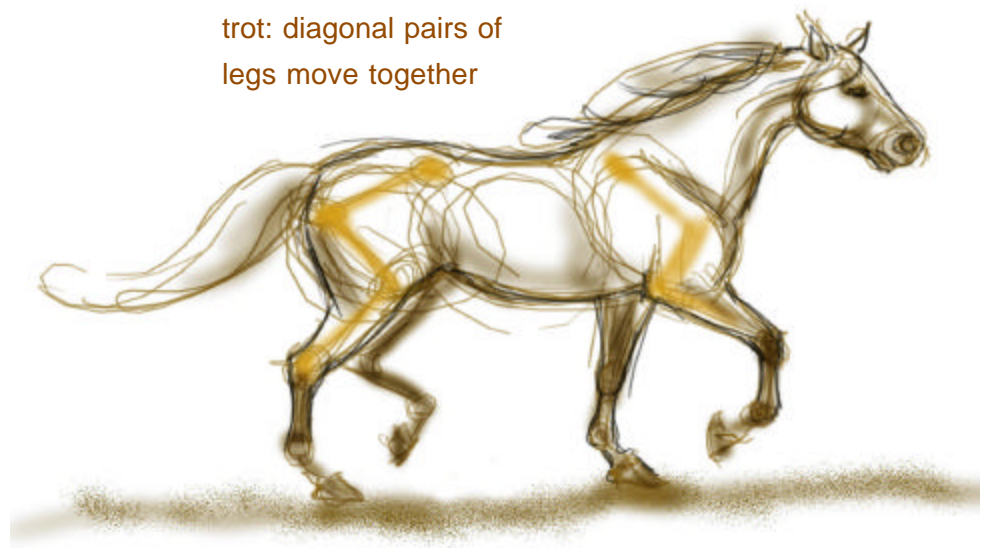
trot: moment of suspension: all four feet are off the ground at once



pace: two legs on one side move together

walk...
trot...
pace...

trot: diagonal pairs of legs move together



Most animals with four legs walk or trot or pace. The **walk is a four-beat gait, each foot hits the ground seperately**: one-two-three-four. Sometimes two or three or even all four feet are on the ground at the same time. There is never a moment when all the feet are airborne, or off the ground.

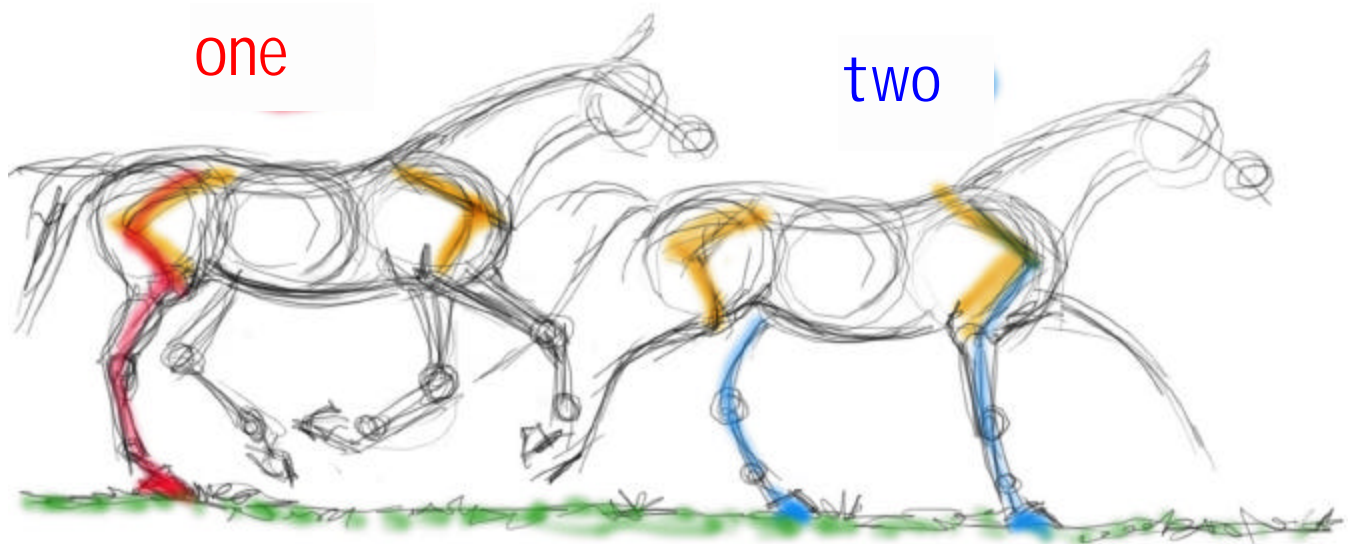
The **trot is a two-beat gait, diagonal pairs of legs move together**; left front/right rear...right front/left rear. In between, the animal floats for a moment; the moment of suspension, when all its legs are

off the ground.

The **pace is like the trot, (two beats) except that two legs on one side move together**: left front/left rear...right front/right rear. Some horses do this, camels do too.

Some horses (and other critters) do a gait that horsemen call **"rack" or "running walk" or "tolte" or "paso"** or other names. The Tennessee Walking Horse is famous for

this gait: it's like a pace, except the two legs on the same side don't quite hit the ground together, making it a **four-beat gait**. It's very smooth to ride, and to draw it, you might need lots of good photos, or to sit and watch the animal for a long time. Elephants also have a very smooth, fast running walk; they are too big to trot or gallop.



one hind leg hits the ground, the others gather for a leap forward... the gold slash shows where the shoulder and hip bones are

the diagonal pair of legs hits the ground...

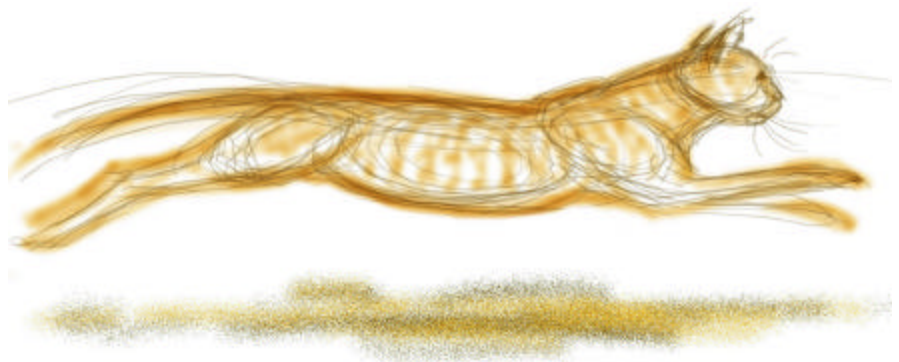
right fore and left rear here... (left lead)

horses do a transverse gallop: diagonal pairs of legs hit the ground in the middle of the stride.

Dogs do a rotary gallop where two legs on one side hit the ground at the same time; horses and canines leave very different track patterns at a gallop.

In a very fast gallop, this diagonal pair splits up; the rear foot hits the ground first, making a four beat gait.

the gallop:



Most four legged animals do some version of a gallop or canter (a polite, slowed down gallop which makes for easy riding).

The gallop is a three beat gait, each beat can be seen in the illustrations above, with number four being the moment of suspension, when all four feet

are off the ground.

Dogs and cats have a second moment of suspension, when all four legs are stretched out, as if leaping. Horses never do this, they are too big and heavy, and they do not have the same kind of flexible spine

that canines and felines have.

Deer, antelope, and other light, agile creatures do this too. Study each species before you draw!

Old artists used to draw horses like this greyhound, with all four legs stretched out,

three

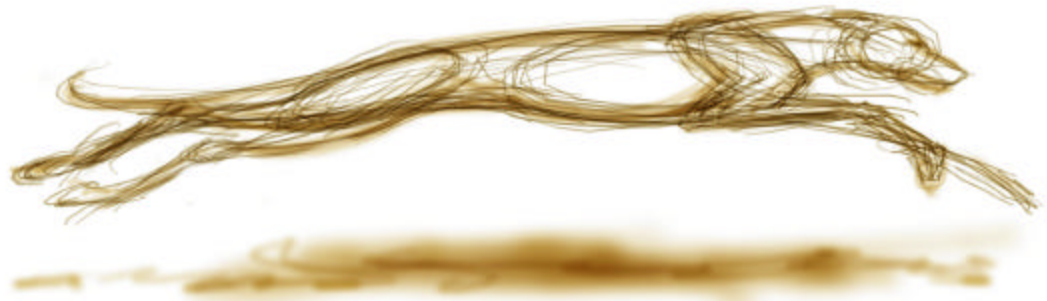
four



the foreleg hits the ground...the last leg to hit the ground is the leading leg, if she were on the right lead, her right leg would be on the ground now...she must be on the left lead to turn left, and on the right lead to turn right.

the moment of suspension: all four legs are airborne, off the ground...the right rear leg is coming forward to start the stride all over again

until Eadweard
Muybridge set up a
lot of cameras and
shot footage of
horses in motion
on a racetrack. His
photo sequences
showed that there
is a moment when
a horse's feet are
all off the ground
(number four illustration above), but



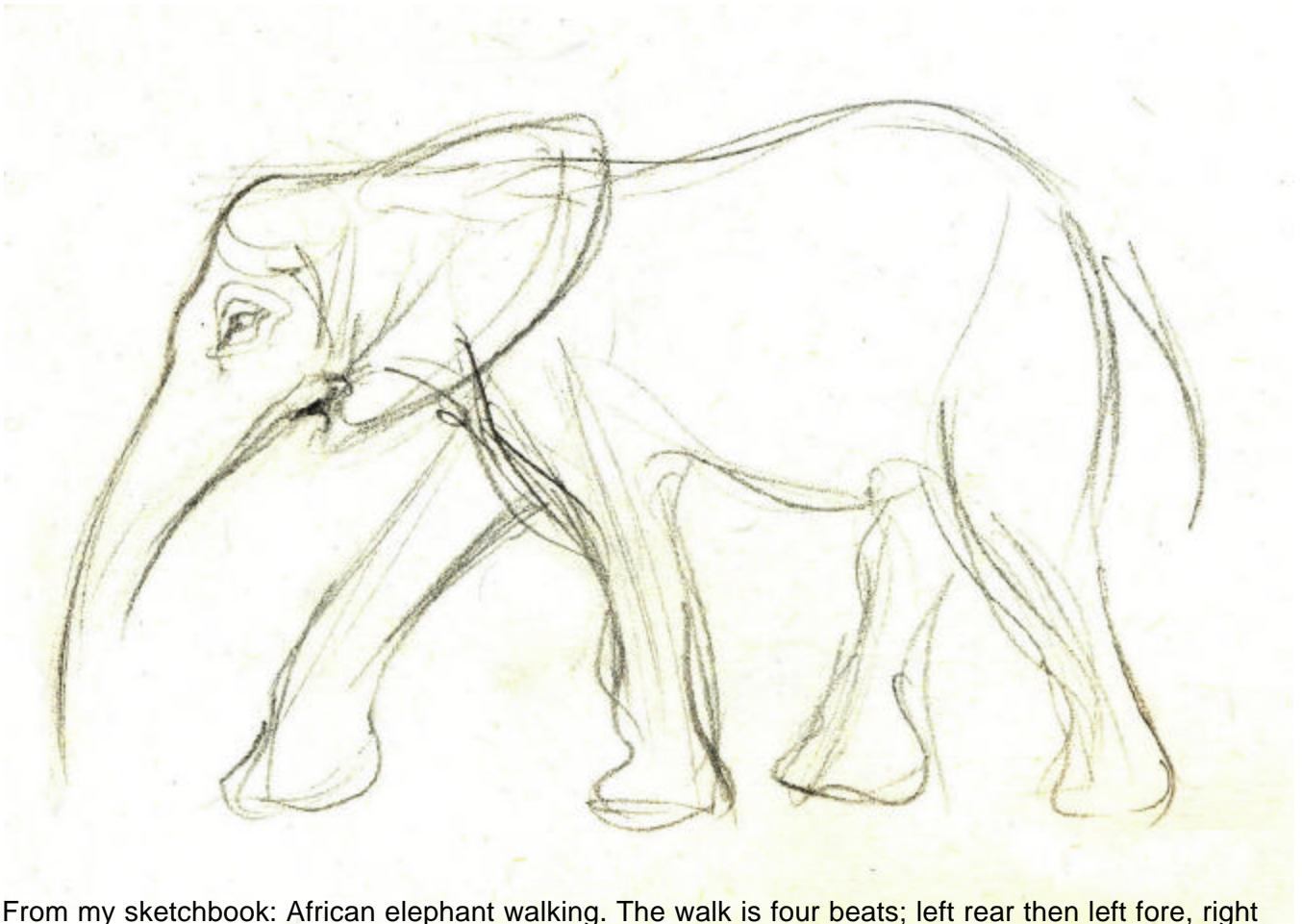
the other moment of suspension: horses don't do this
felines and canines and some other critters do

that the old artists had drawn them wrong. He also began the art of motion pictures; movies. His books are very good reference, even though the photos are more than a

hundred years old.

Other reference on moving critters can be found in nature specials, DVDs, and even well-animated cartoons.

Disney's "Lion King" contains a terrific sequence of Simba galloping across the desert, and the footfalls are perfect.



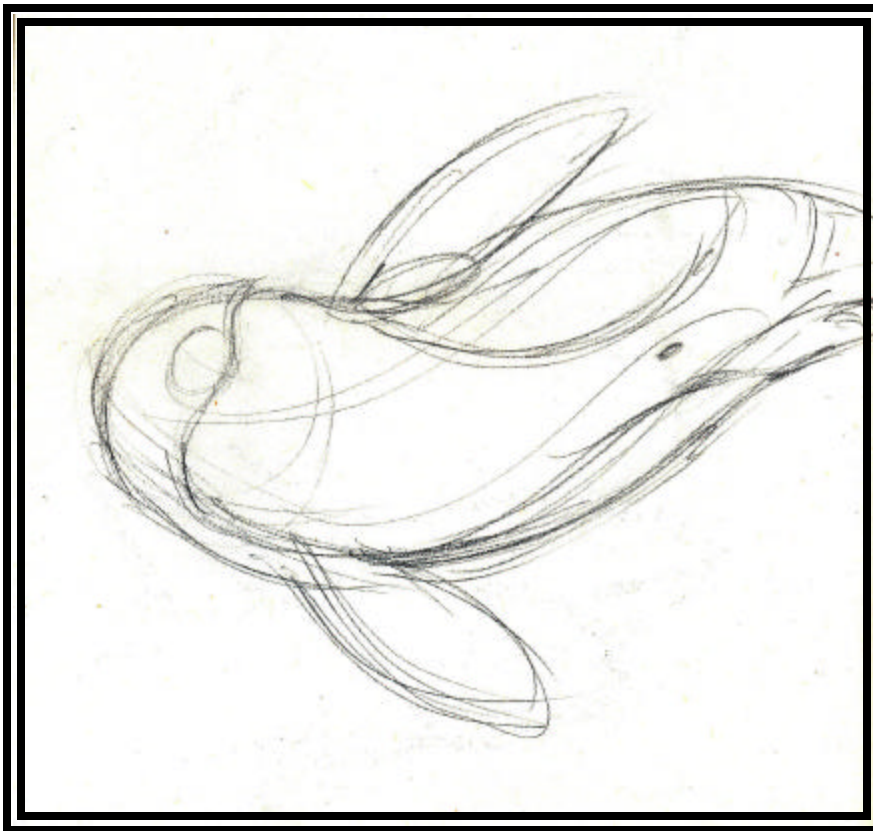
From my sketchbook: African elephant walking. The walk is four beats; left rear then left fore, right rear then right fore leg. In a drawing it looks very much like the horse pacing; two legs on one side moving nearly together.

The difference is, the two legs hit the ground one after the other, not together, and there is no moment of suspension; there are always several feet on the ground.

In this and the other sketches, notice how loose and scribbly the lines can be...if they are in the right place, describing the animal and its action.

Sometimes action sits still.
Sometimes it's all in the expression. (young possum being raised by wildlife rehabber).



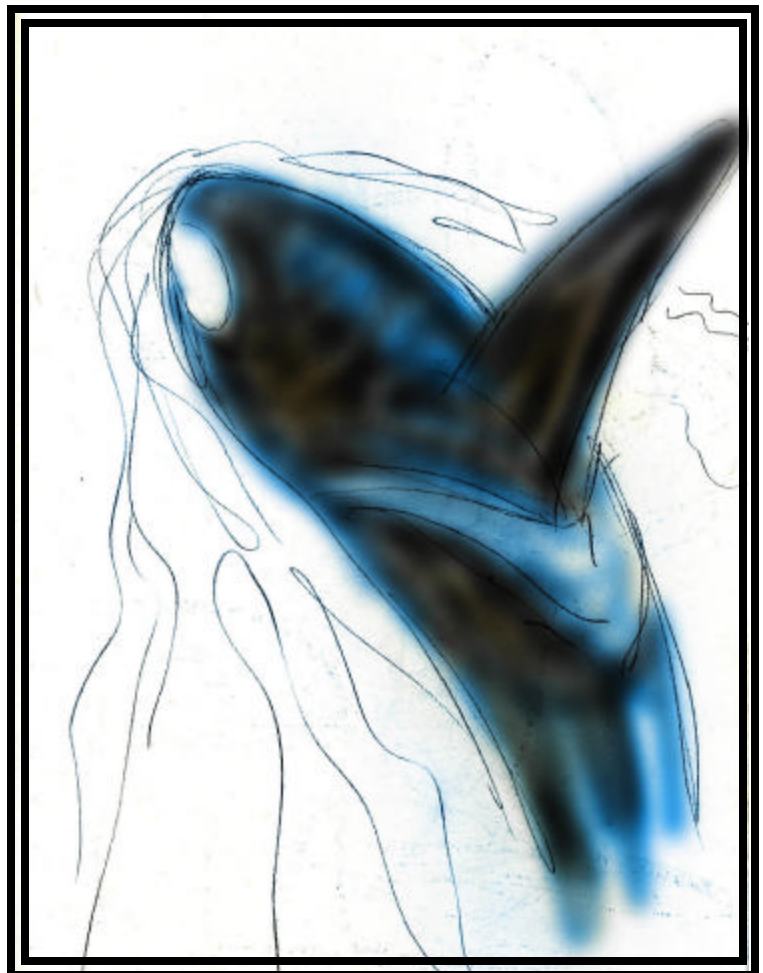


fast he's run out of the picture).

Use sweeping lines, S-curves, avoid placing things square in the middle, or on horizontal or vertical lines (straight up and down or sideways make your critter look very stable, as if it can't move).

One way to show dynamic motion, is not to draw an animal straight from the side.

Get above them, behind them, in front of them. Have them zooming out of the picture (the poster and bookcover for "Seabiscuit" show only half the horse, as if he is running so





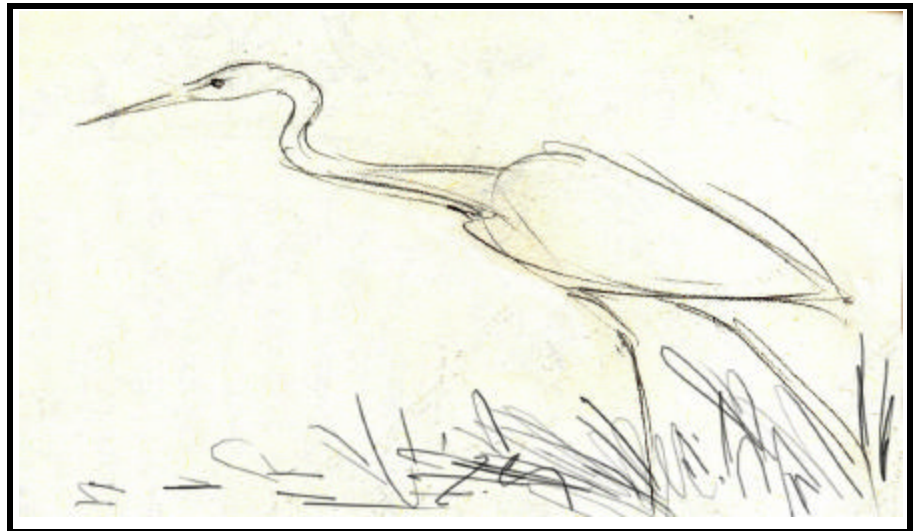
ing and waiting and waiting.
He's vertical, his beak
nearly horizontal; stable L
shapes, no movement...until
his beak strikes like light-
ning!

From my sketchbook:

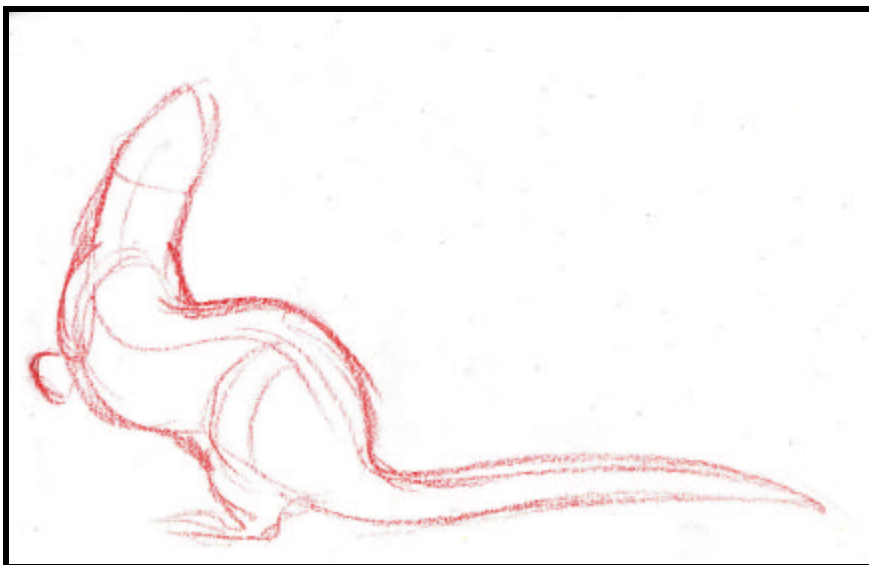
The sika deer was walking
when I drew her, by leaning
her more here, and running
her off the side of the page,
she looks like she is running
faster.



The great egret (center) and
the otter have snakey s-
shapes, and are not centered.
The egret is also just off bal-
ance, as if he is about to take
a step.



The blue heron (bottom) hunts
by standing very still and wait-



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