

Famous Artists Cartoon Course
Westport, Connecticut

Animals

Lesson

16

Rube Goldberg

Milton Caniff

Al Capp

Harry Haenigsen

Willard Mullin

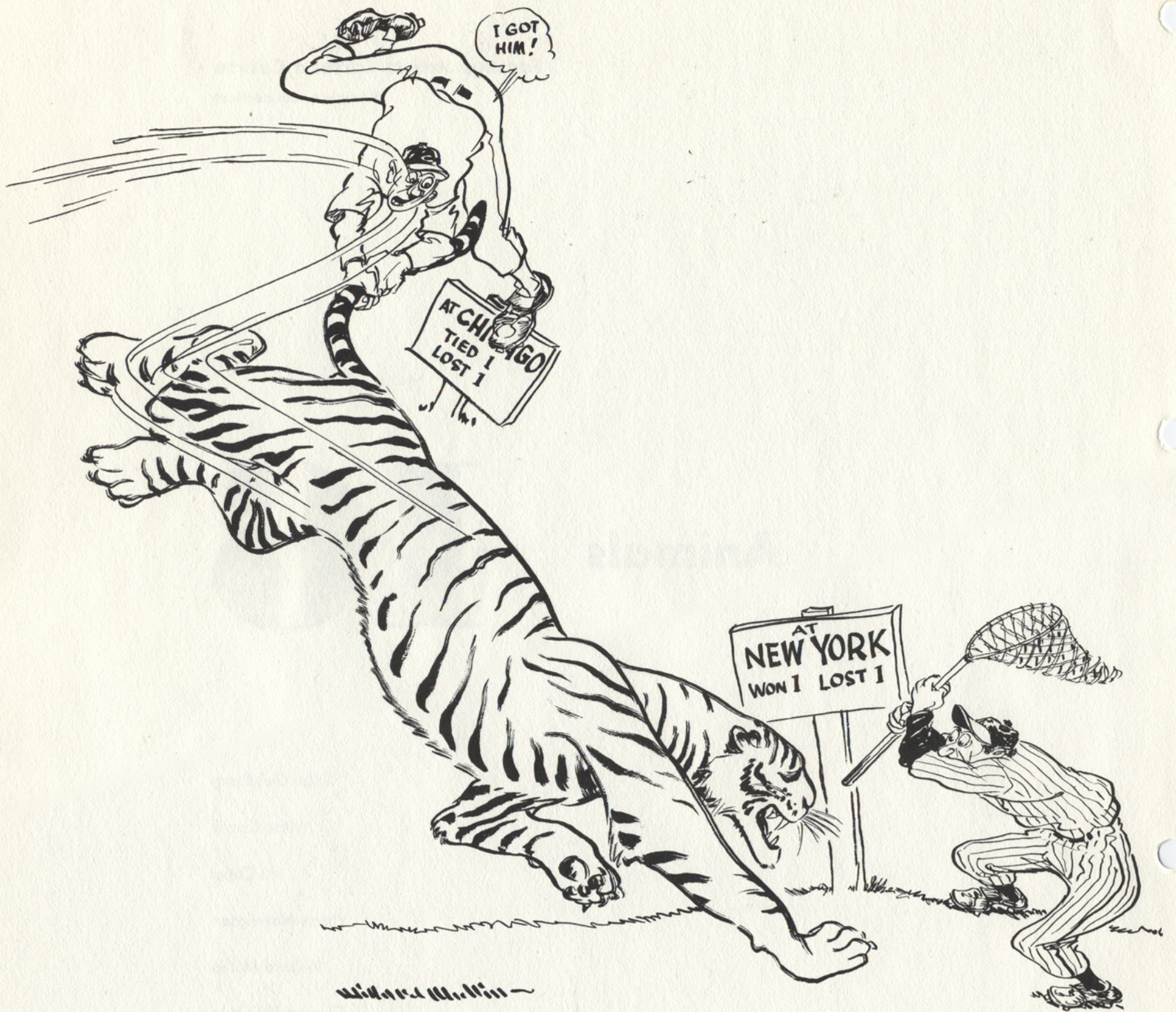
Gurney Williams

Dick Cavalli

Whitney Darrow, Jr.

Virgil Partch

Barney Tobey



Ever since people came down out of the trees the human race has associated with animals. Our language, thoughts and proverbs are colored with references to animals. They are a graphic part of our heritage — extremely useful to cartoonists in putting ideas across to our readers

Animals

You studied the human "animal" when you studied anatomy and the figure in action. In this lesson, we will show you comparisons between the bone structure of animals and man. For comparison with man we will use a horse, a cat and a dog. In our diagrams we will make them about the same size to show the comparison quickly. We use these animals because they are representative of many similar, related species. For example, with slight proportional variations and differences in size, a cat is similar to a tiger, lion, puma, leopard, cheetah, jaguar, bobcat or lynx. Fortunately, these three animals serve a double purpose, because in addition to being similar to other animals, a cartoonist draws horses, cats and dogs more often than all the other animals combined.

Harold Von Schmidt, America's foremost animal artist, tells us that he *himself* often assumes the pose of the animal he wants to draw — his knowledge of comparative anatomy then enables him to transfer the human action to the animal. Of course, very few of us will acquire the ability to do this, but a cartoonist can save himself a lot of work later by soaking up a little knowledge *now*.

Animals come in such a wide variety of shapes and sizes that we can't show you how to draw them all. If you plan to specialize later in drawing animals, there are many good books that cover the subject. For a starter, one of the best we've seen is Ken Hultgren's *The Art of Animal Drawing*, published by McGraw-Hill.

Good pictures of animals in action are scarce, even in this age of photography. When it comes to drawing animals, your morgue is important; clip and save every beast you see in print. If you're lucky enough to live near a zoo, quick sketches are solid gold for later use. Also, there are plenty of strips and features running that started first with sketching pets around the house.

With knowledge of fundamental bone structure and good



morgue material a cartoonist should be able to draw any animal in the ark. You know that the bone structure is pretty much the same in all our four-footed friends — only the proportions change. Rough out your animals first, then dig into your morgue for details of the head, feet, tail, etc.

The style of drawing used in animated movies follows the human form more closely than the animal. These celluloid animals usually wear clothes and walk on their hind feet. Even the heads have been changed to give them a super-cute, human look. This is a fairly simple style and fun to do, but in a regular comic strip or gag with standard-type humans, animated-style animals are apt to be out of key.

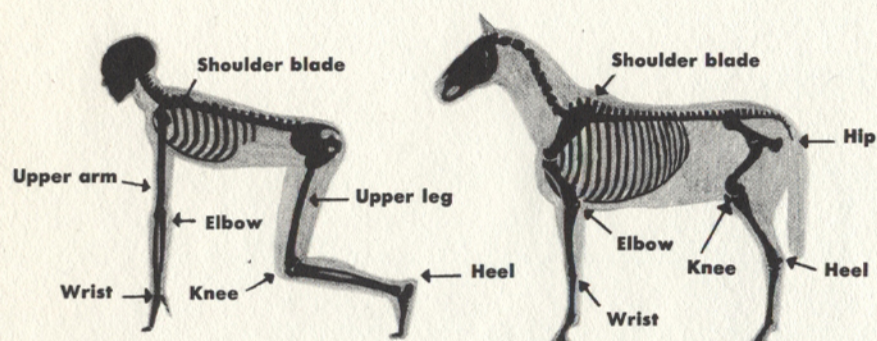
Why draw animals in cartoons? Political and sports cartoonists *must* train themselves well in drawing fairly realistic animals. The political cartoonist uses them to represent nations or characteristic types of politicians. Most colleges and athletic teams have animal mascots, and a sports cartoonist must be able to draw them in action. As a gag or strip cartoonist, you can take more liberties with animals, depending on your style. They add character and authenticity when spotted around your work.

They are a great help to us in portraying human nature. The expressions *strong as an ox*, *sly as a fox*, *gentle as a lamb*, etc., are graphic; they create a picture in the mind. If we can transfer this mental picture to our cartoon, we are using symbols already familiar and understandable to our readers.

In the following pages you will benefit from your faculty's long experience with drawing animals. Willard Mullin uses more animals than the others and has a lot to say on the subject. Milton Caniff gives us some realistic animals. Rube Goldberg has the darndest collection of . . . well, take a look.

Remember: people *like* animals, even wild ones. That is why our zoos are always crowded on Sundays. If you can make a child feel that he would like to cuddle your cartoon bear, you have won that child as an admirer of your work.

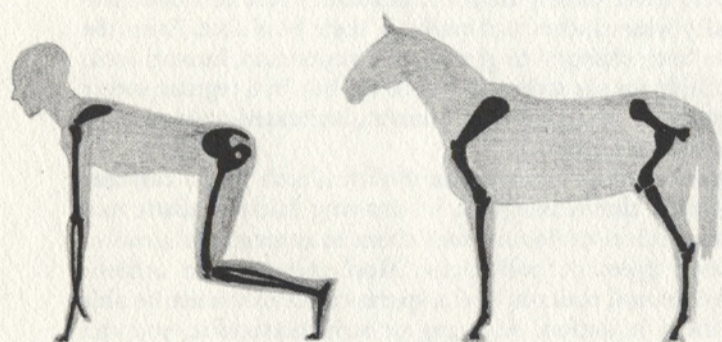
A comparison of man, horse, cat and dog



The greatest difference between man and four-legged animals is the size and position of the shoulder blade. An animal's shoulder blade is on the side of the chest in order to support its weight. Man's shoulder blade is on his back



All four-legged animals have short, thick upper "arms" (from the elbow to the shoulder) and short, thick upper legs (from the knee to the hips)



Here, in black only, we show the legs. Study them carefully to understand where they differ and where the proportions change



You will notice that the dog and the horse are very similar while the cat's legs are shorter and in different proportions to its body

Bone structure

The greatest difference between the skeletal structure of men and animals is in the legs. Next in importance is the position and size of the shoulder blade. Then comes the difference in the "upper arm" which, in the animal, is short and heavy and sits well into the body to help support it. The "forearm" in an animal, which is often mistaken for its upper front leg, is very similar to the human forearm. An animal stands on his toes and his "fingers." Study the diagram here to see where the wrist, elbow, knee and heel are changed relative to their placement in the human form.

Necks and heads vary in animals according to their individual requirements. The head and jaw are short and powerful in meat-eating animals while grass-eating animals have long heads and necks plus a different type of teeth which extend well back into the head along the jaw. Think of any grazing animal and you will realize that each of them has basically the same general head shape; think of cats, lions, dogs, wolves, etc. and their similarity is apparent too.

The structure of an animal's ribs and torso differs from man's in that it is deep, narrow and long, widening at the "lower ribs." Man's, in comparison, are wide, flat and short. The rib basket narrows toward the front, allowing for free side motion of the "front legs." It stops at the center or slightly back of the center of the body where the stomach lies. The rib basket stops here to allow the rear part of the backbone to bend easily, to help propel the rear legs in fast action and to aid in turning. It also allows the rear legs to have forward motion without striking any bone structure. The rear legs are joined to the backbone by a bone extension which is the pelvis that "sets out" from the backbone to allow the legs ample clearance of the stomach. The tail is simply an extension of the backbone.

Leg bones

Special attention should be given to the bones of the legs. Structurally they are all alike but they vary greatly in different species of animals. The legs are diagramed here in a side view. The leg bone diagonals counterbalance and cushion the weight of the body. Even though bones are very hard and strong, their joints are arranged to "give and take" depending on the strain applied. This "give and take" ability is also directly related to the animal's locomotion.

The characteristic of the front leg at the top is the shoulder blade which is flat but has the outlined shape of a cone with the tip slanting forward and down. Here it meets the "upper arm" which is short and thick and slants down and back at about the same angle as the shoulder blade. From here the direction of the bone structure proceeds vertically down past the "wrist" and the "thumb" to the first three joints of the "fingers" which is the foot of the animal.

The upper rear leg connects at the pelvis in a ball and socket joint. It is short and heavy like the "upper arm" and varies according to the species. It slants forward and down at about the same angle that the "upper arm" slants back and down. From the end of the upper leg, the lower leg, often mistaken for the upper leg, takes a direction back and down at a right angle to meet the "heel" or hock. From the end of the heel it proceeds nearly vertically, favoring a forward slant, to the toes or rear foot.

The muscles

The frame of a building is covered with wood, plaster and so forth. The frame of an animal is encased in muscles. The shapes of these muscles determine the character of the total form as we finally see it. Animals with short hair, such as a horse, a short-haired dog (Boxer) or a cow, let you see part of the muscle function under their tightly stretched skins. This is quite noticeable in a moving horse. In other animals such as a cat, bear or long-haired dog, this is not so.

Good drawing of an animal in its characteristic form is dependent on knowledge of the muscle structure. The forward part of the chest, shoulders, legs and neck contain the large important muscles. The contour and thickness of the front legs, shoulders and rear legs and hips should have your attention since they contain the most active muscles. The chest muscles sit well forward where they join the shoulder muscles and stretch back, under and between the front legs.

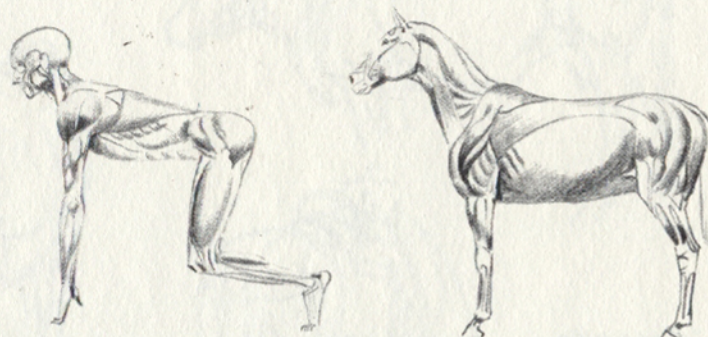
Study the direction and shape of the muscles in the marginal picture. Also study those of the horse and dog carefully. You can learn more that way than by simply reading about it. Although the muscles are in the same place on each animal, notice that they vary in form among the different animals. For example, the long muscle of the cat family sweeps back from the lower part of the shoulder blade to meet the back and top muscle of the rear leg. This long sweeping muscle gives definite character to the final drawing of the cat. The long, top neck muscle plus the leg and shoulder muscles of the horse are important to the character of the horse. Study the muscle construction so you can transpose them into different views of the animal you may need to draw. Study where they begin and end and their general shape. This will allow you to place them correctly when you change the position of the animal.

Final form

After the skin has been stretched over the frame and muscles, we see the final form. You may ask at this point, "How is the animal shaded?" Do you recall the shading of a sphere and cylinder? An animal, like a human, is composed of spheres and cylinders with individual variations. Most farm and wild animals live out of doors, so the light source is generally from above. Whatever the light source, the feeling of *solidity* must be achieved.

As you work on your drawings, you will find it will pay you to rough in the basic forms and the animal's action before trying to draw the over-all figure as it finally appears. Getting these forms figured out beforehand will help you make a final drawing that is solidly three-dimensional and convincing. The final outline is just the frosting on the cake — it comes *after* the forms are thought out.

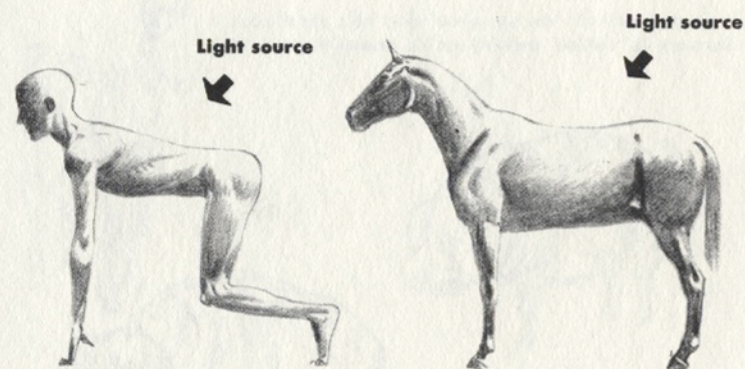
The *basic* structure of a handsome movie hero is the same, for example, as a pot-bellied politician with whiskers down to here. The *details* identify the types to your readers. Just in this way, the *details* make the difference between horses, ponies and mules; cats, lions and panthers and dogs, foxes and wolves. Figure out the action and the general structure of the breed of animal you are drawing — then go ahead and finish up the beast with details from your memory and morgue. Remember: if your other characters are drawn in a simplified comic style, don't go overboard by putting realistic, lifelike animals alongside them — they'll look out of place.



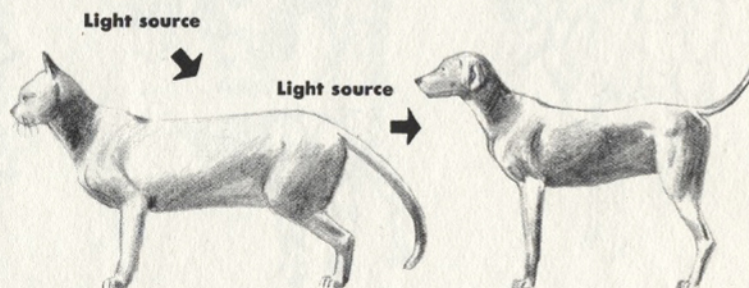
The powerful muscles occur in the shoulders and legs of animals



The muscles are developed to the particular needs of each animal and are correspondingly proportioned. The careful study of muscles as they relate to different species of animals is important to you in making a drawing that finally gives the character and form of the animal



A covering of skin tissue and hair makes a familiar visual form. The source of light intensifies the roundness of the form



With knowledge of structure and muscle a good solid drawing develops



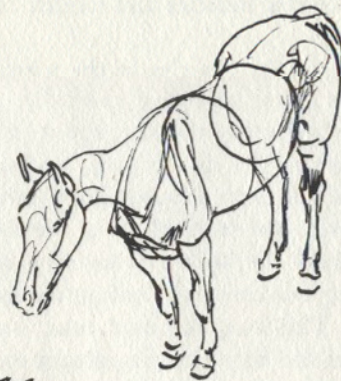
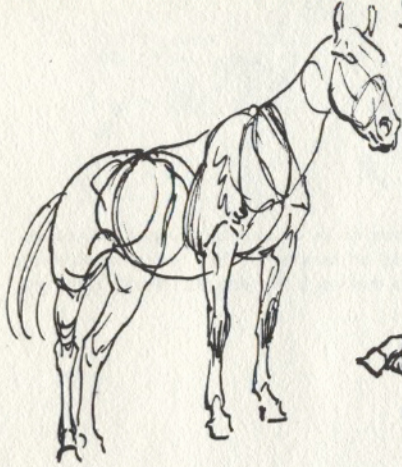
You fit a rider on a horse. Notice the leg on the far side following the contour of the horse's body



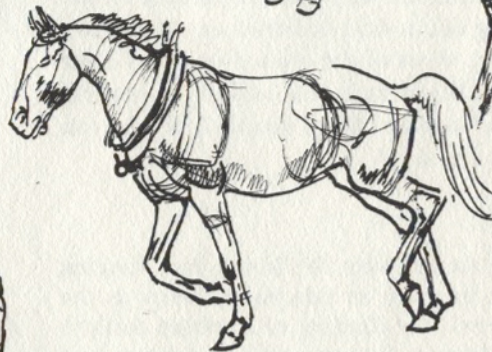
You put a saddle on a horse. It must follow the contour of the horse's back



When making a finished drawing from a sketch, study the bone and muscle charts and build the bones and muscles into the form in the position you wish to draw it



From any point of view an animal must be a constructed form, not an "outline" drawing but an animal that is built



After study and observation — you learn how to draw by drawing



Study the construction of animals. Make sketches of details and character and notes on proportion. Then draw them solidly as we have shown you here. Do not draw the outline.

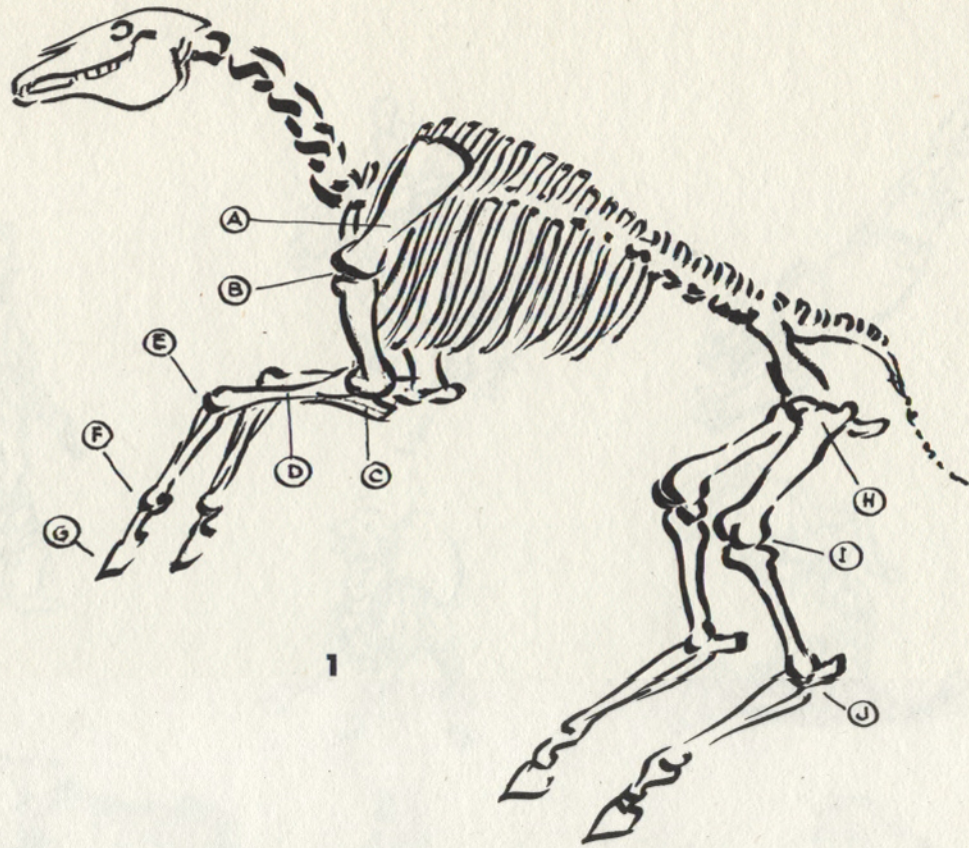
DRAW THE SOLID FORM OF AN ANIMAL

Knowledge works for you

What we have said in this lesson exhausts what can be said in words. Knowledge of form, anatomy, motion and your own observation of attitudes, character and rhythm should give you a good start for animal drawing. No one can make the drawing for you. We can only point out to you fundamentals of construction and the method of procedure. You must make the drawing!

On these two pages we show you a variety of animals in many positions and actions for your observation and study. These drawings were made with the kind of knowledge we have just taught you—plus observation. You can do as well by studying and analyzing and by *OBSERVING AND REMEMBERING*. Make hundreds of drawings like these. If you do not seem to “get it,” go back in this lesson to the part that applies to your problem and study it carefully.





Animals by *Willard Muller*

Noah's Ark plays a tremendous part in the life of a sports cartoonist, but the beasties don't always come in two by two. Sometimes they run in herds. There is the Princeton Tiger, the Detroit Tiger, the Missouri Tiger and the one from L. S. U. (Swamp Tiger, I believe). California's Golden Bear, U. C. L. A.'s Bruin, the Chicago Cub, Baylor's Bear, the Big Bad Chicago Pro Bear and the Brown Bear among others. The Fordham, Los Angeles and Rhode Island State Rams. And Mustangs, Longhorns, Wolverines, Gophers, Beavers, Wolf Packs, Lions, Bull Dogs, Horned Toads, Owls, Eagles, Hawks, 'Gators, Panthers and Goats all over the place. Besides the traditional animals as symbols, you will be able to turn others to your own use. For example: Some fighter you may be drawing is a notorious clutch and clinch guy. Well, just what does an octopus look like anyway? That's where your "morgue" or clips come in.

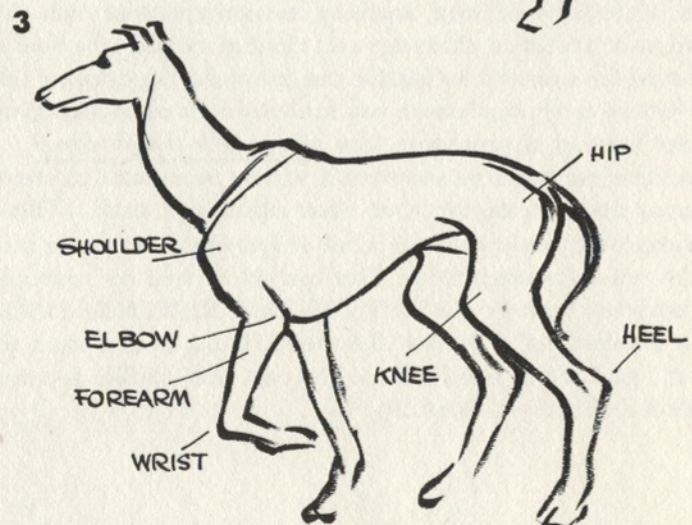
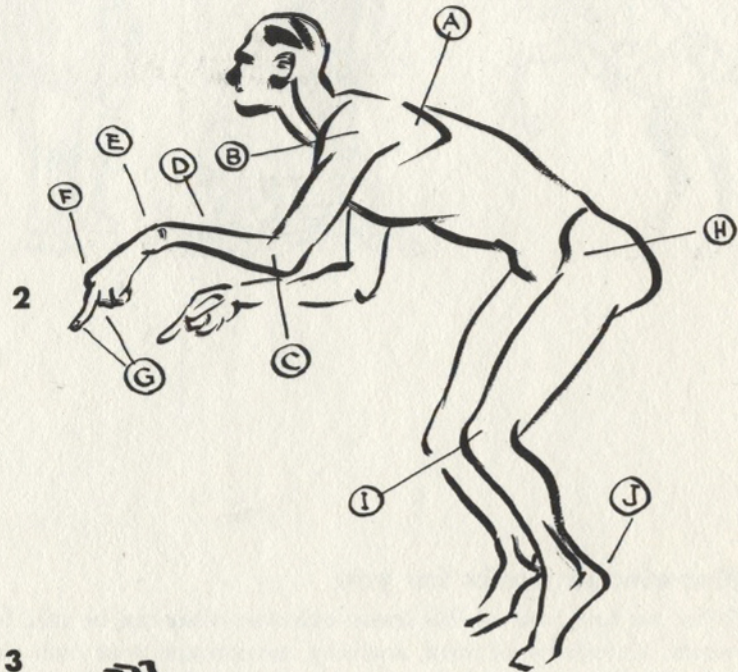
In drawing animals it might be well to compare, in a skeleton of an animal, the joints as they correspond to similar points in the anatomy of man.

In Illus. 1. (Skeleton of a horse) and Illus. 2. (a man, we trust) (A) is the shoulder blade, (B) the shoulder, (C) the elbow and (D) the *forearm*. What most people think of as the "knee" in the foreleg is in reality the *wrist* (E). (F) is the knuckle, and (G) the hoof is actually the "fingernail" of *one* toe — the rest having been lost in the eons of evolution since eohippus (the prehistoric horse) bounced around this young earth on three toes.

To go on to the hind leg, (H) is the hip, (I) is the knee and (J) is the heel.

You will notice in each instance that the joint of the animal, (shoulder, wrist, elbow, etc.) seems to be one point higher than in man. That is, the elbow and knee are right next to the body; the heel and wrist far above the "foot." But the corresponding bones *are* there. The animal's legs are hinged well up, and the upper arm and leg are not as free as in man.

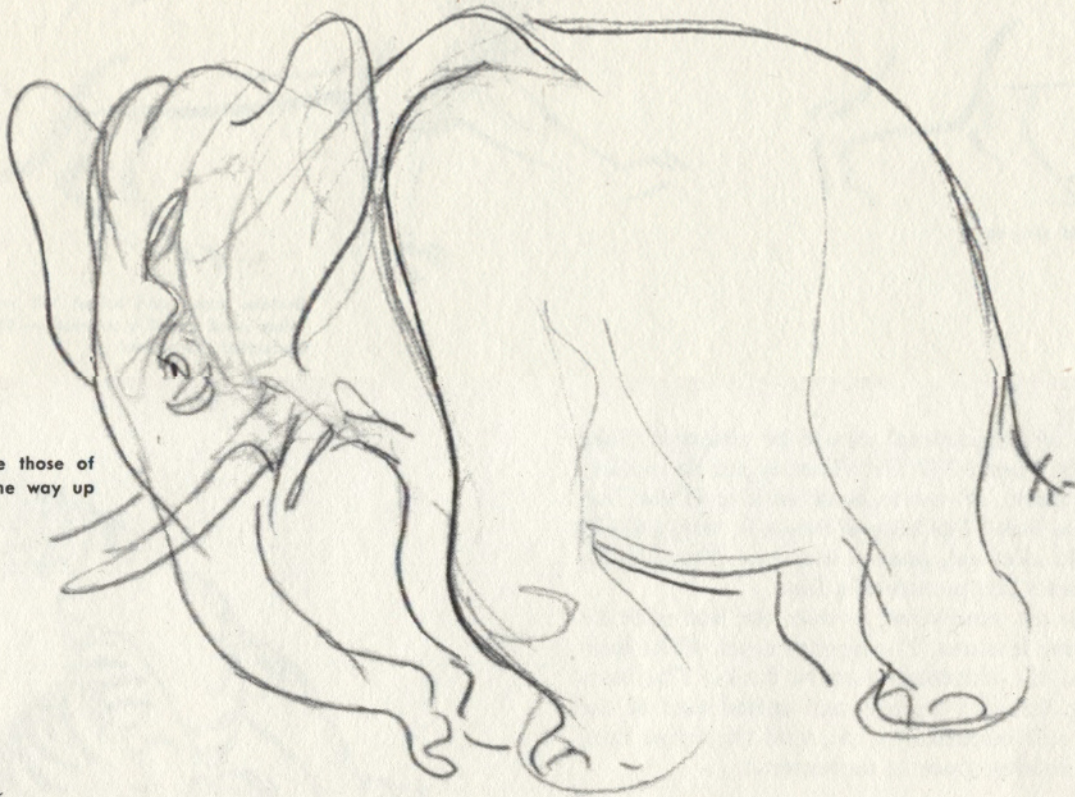
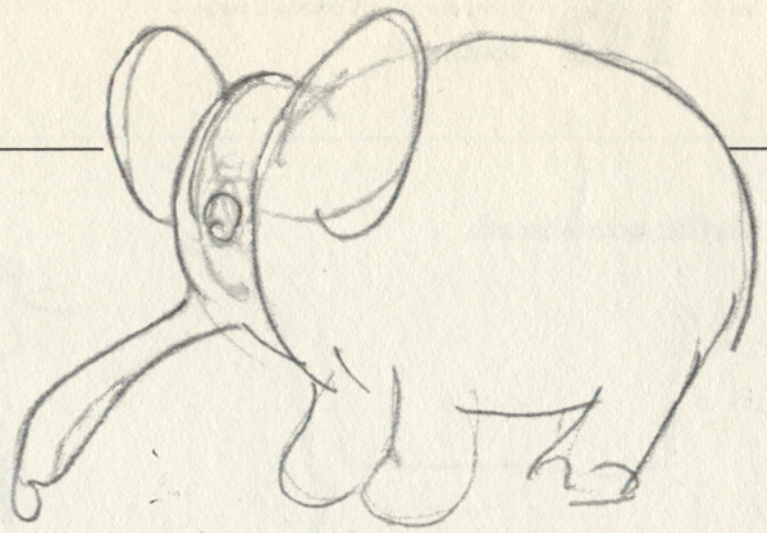
The same general scheme applies to all animals. (Illus. 3.)



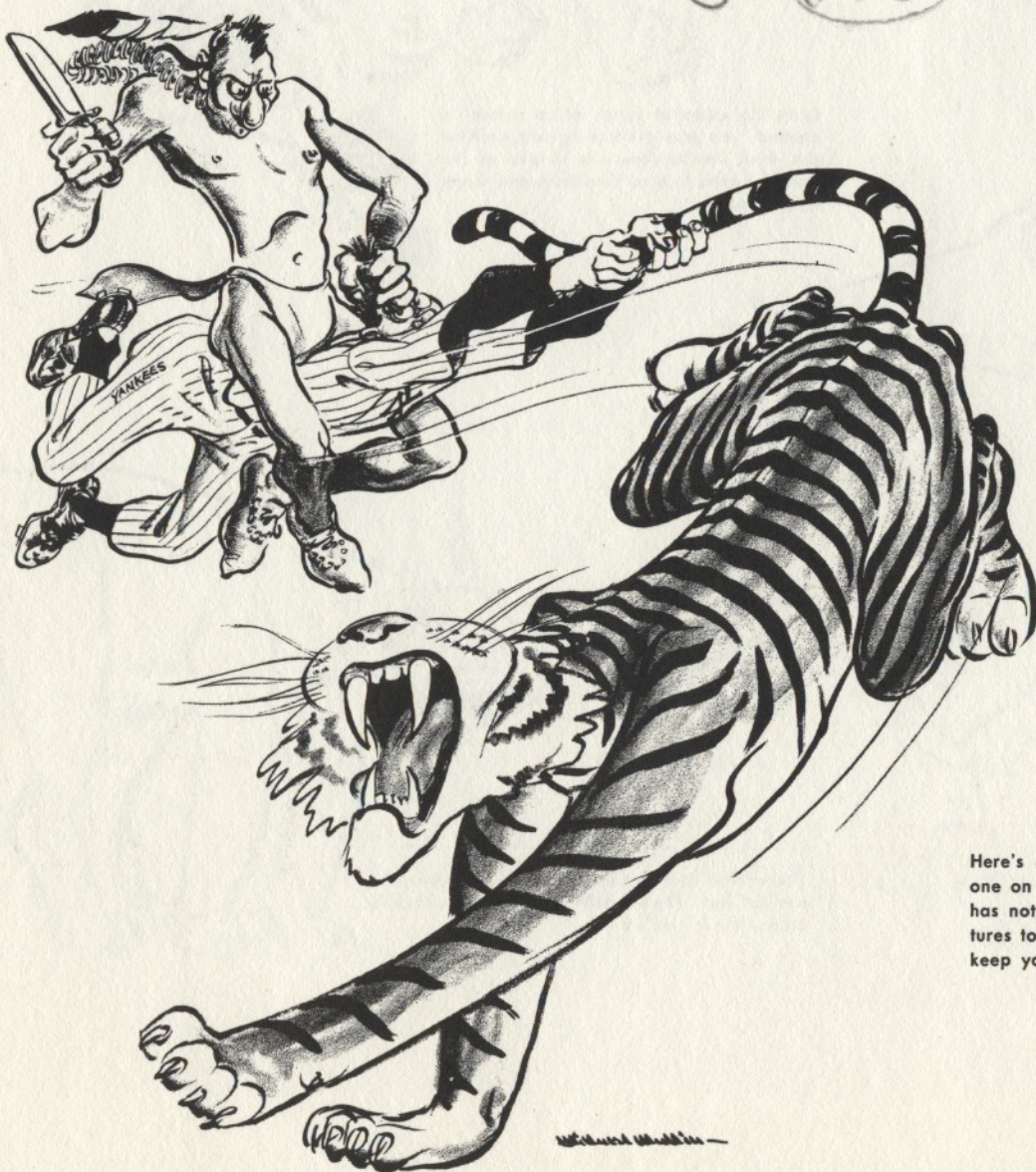
It is well to learn the construction of your animals. Once you have that you can use them in *any position*. The construction *does not change with action*.

One example is the elephant. He is *not* merely a great round hunk of flesh with kegs for legs.

In reality he is a long-legged animal; those arm bones above the forearm run clear to the shoulder.



The elephant's legs, like those of other animals, run all the way up to the rafter of his back



Here's another tiger. Compare him in this pose to the one on the opening page of this lesson. The construction has not changed — just the position of the various features to give us a different view of him in action. Try to keep your cats sweeping and graceful in action

Mullin continued



Draw any old alley cat

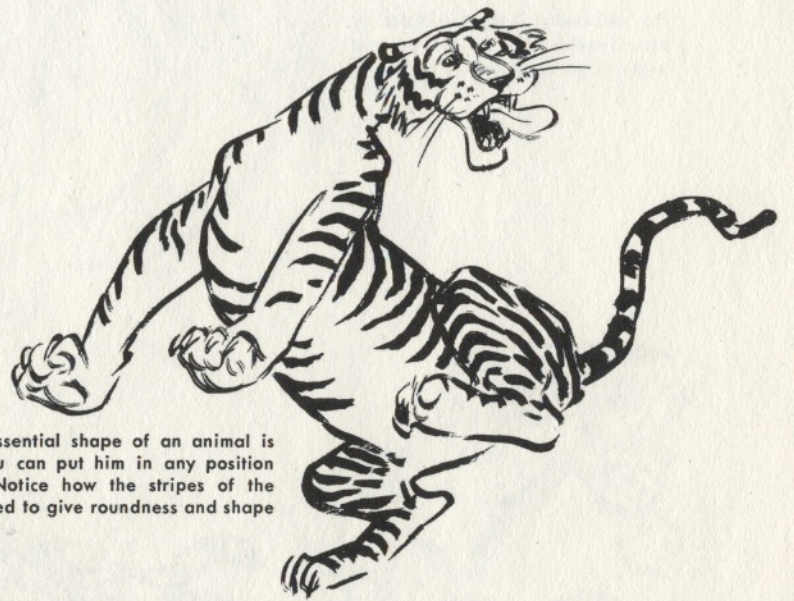


Besides mane and tufted tail one other small detail is needed — the undershot lower jaw

The cat family

The salient feature of each animal should be observed. Take the lion — Ah, Ha! The Mane! *NO SIR!* That is just the parsley around the fish. The mane, of course, is distinctive of the lion but that ain't the Lion, Bub! The king of beasts is, first, a *CAT!* You draw any good old alley cat, put the mane on him, tuft his tail and you have a pretty fair picture of a lion.

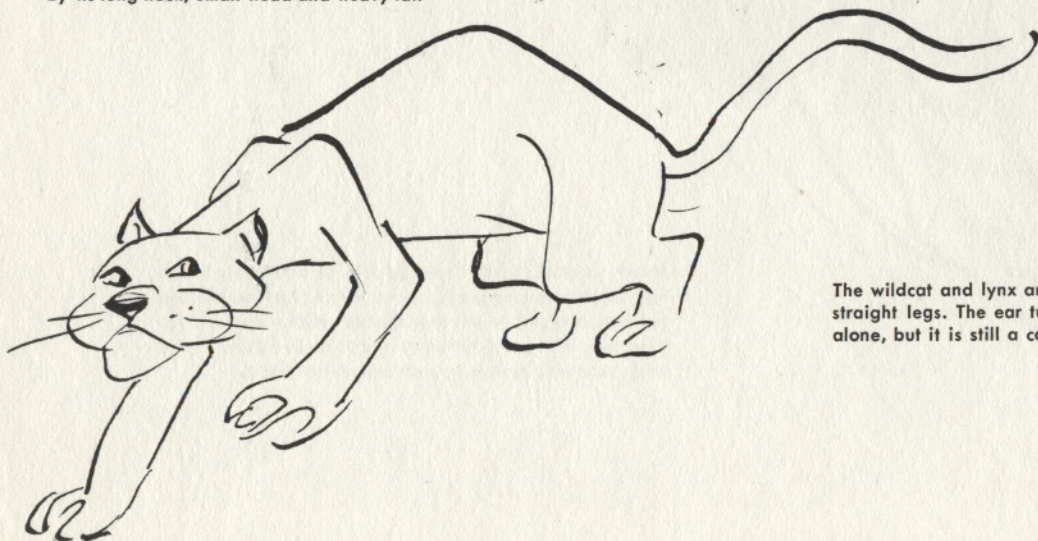
Each member of the cat family has, as does the lion with his mane, its own distinctive features. The tiger's stripes, white bush around the chops and the extremely narrow flanks. The leopard's spots. The long, straight forelegs and tufted ears of the lynx, etc. But each is still essentially a cat, with the feline face, retractable claws and flowing graceful movements.



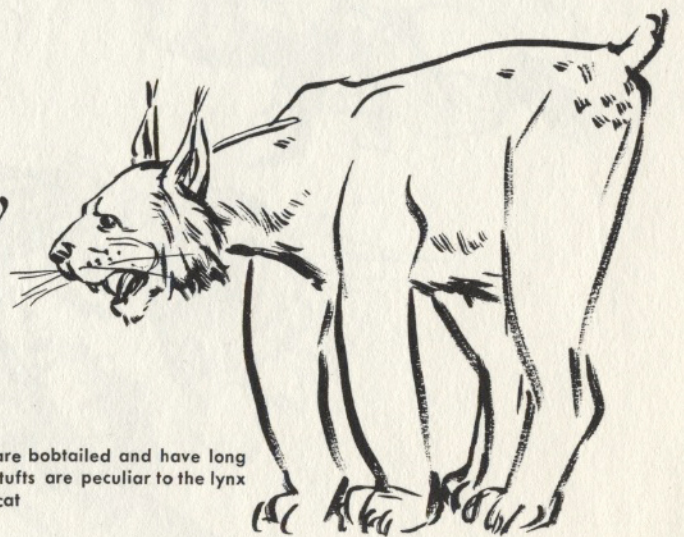
Once the essential shape of an animal is learned, you can put him in any position you wish. Notice how the stripes of the tiger are used to give roundness and shape to the form



The puma or mountain lion is characterized by its long neck, small head and heavy tail



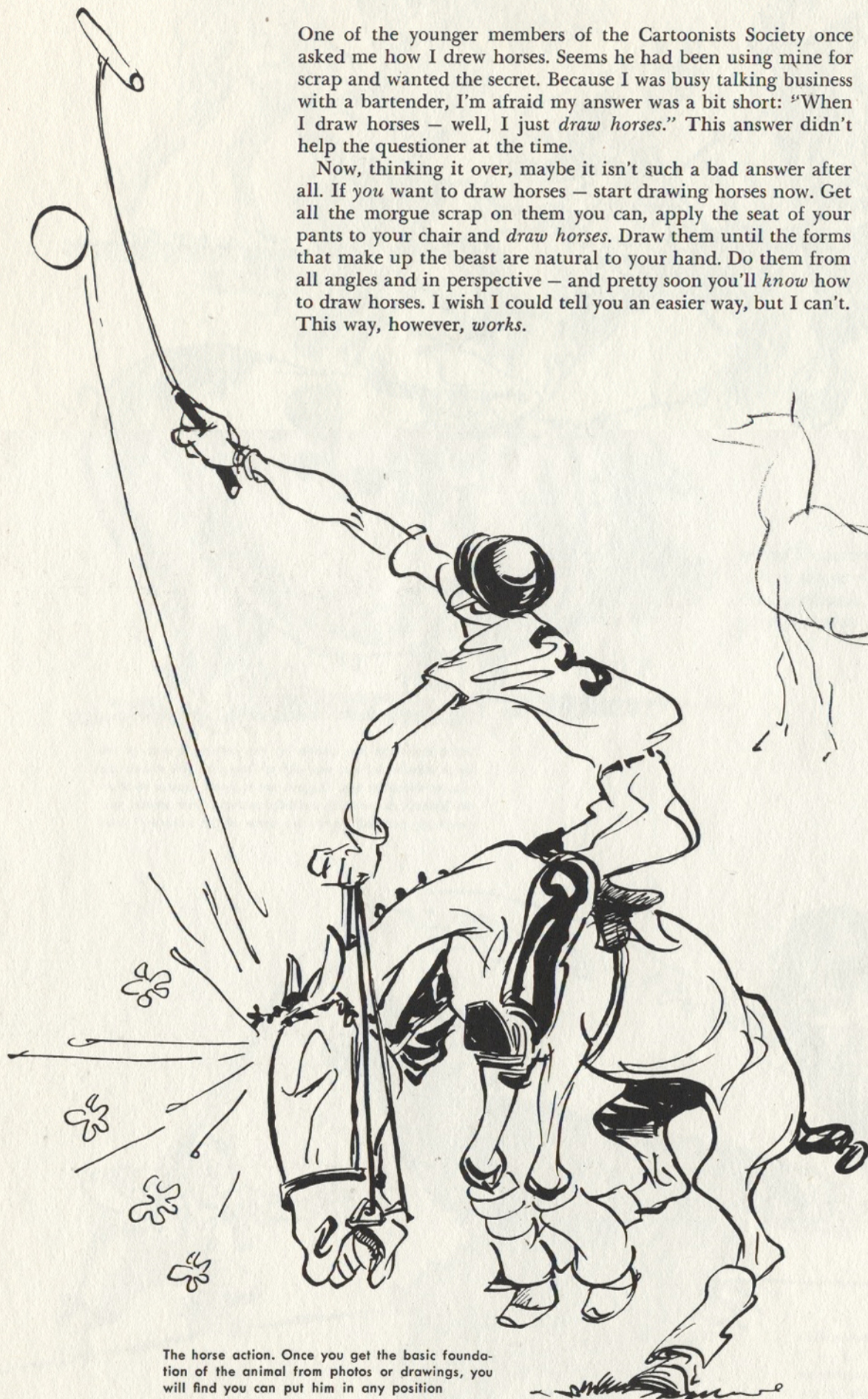
The wildcat and lynx are bobtailed and have long straight legs. The ear tufts are peculiar to the lynx alone, but it is still a cat



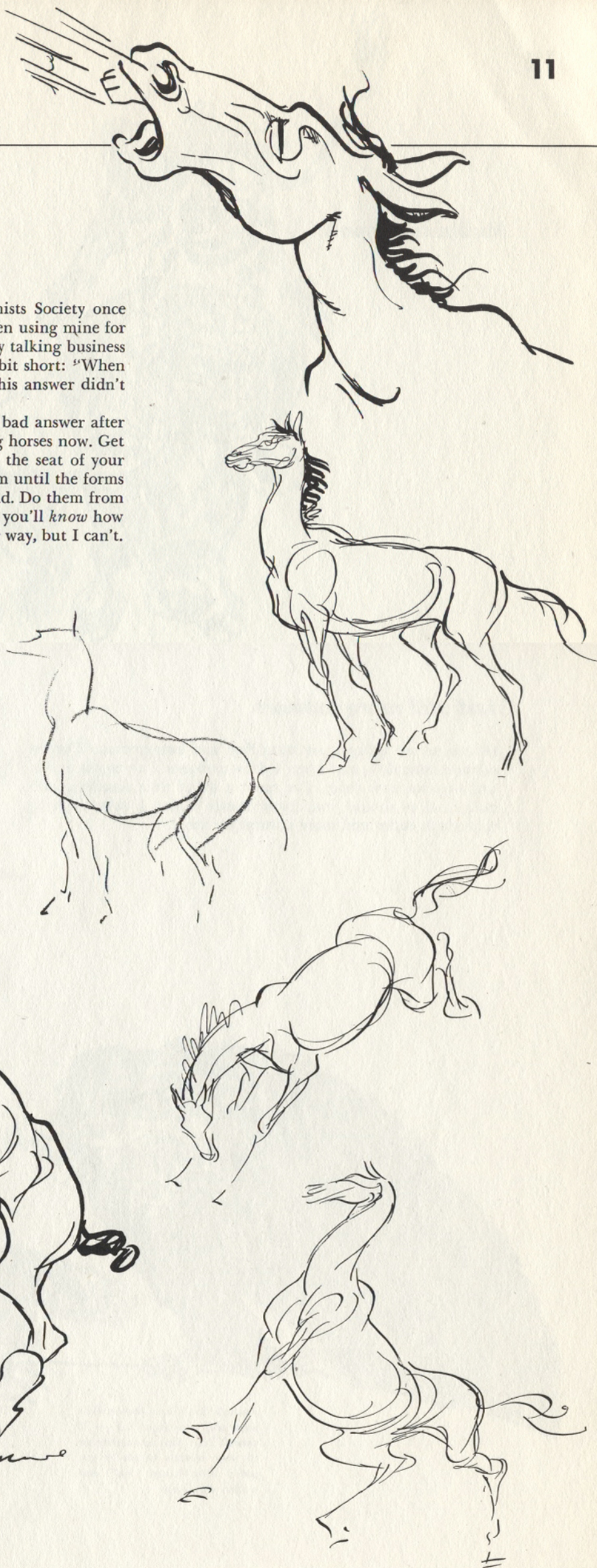
Horses

One of the younger members of the Cartoonists Society once asked me how I drew horses. Seems he had been using mine for scrap and wanted the secret. Because I was busy talking business with a bartender, I'm afraid my answer was a bit short: "When I draw horses — well, I just *draw horses*." This answer didn't help the questioner at the time.

Now, thinking it over, maybe it isn't such a bad answer after all. If *you* want to draw horses — start drawing horses now. Get all the morgue scrap on them you can, apply the seat of your pants to your chair and *draw horses*. Draw them until the forms that make up the beast are natural to your hand. Do them from all angles and in perspective — and pretty soon you'll *know* how to draw horses. I wish I could tell you an easier way, but I can't. This way, however, *works*.



The horse action. Once you get the basic foundation of the animal from photos or drawings, you will find you can put him in any position

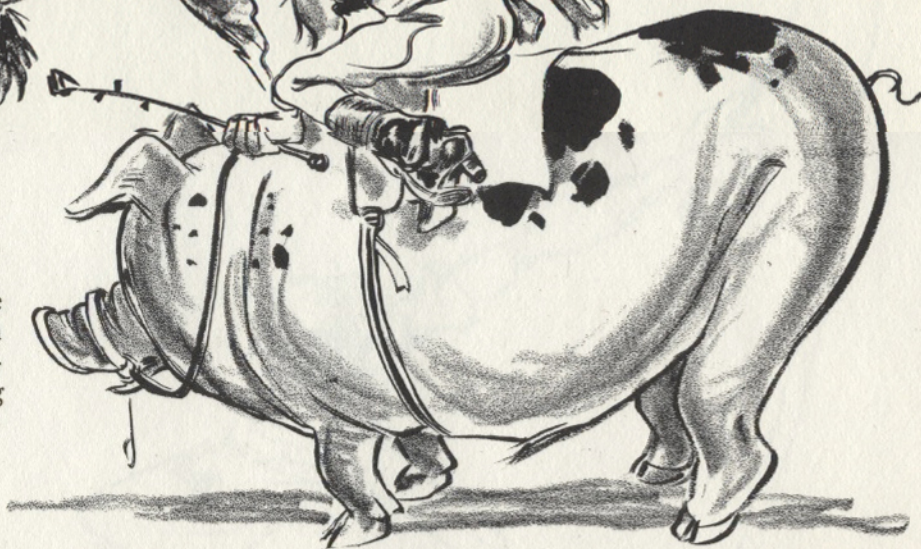


Mullin continued



And still more animals

Of course my animals are simplified and exaggerated. They're *cartoon* animals — and when I draw cartoons I try to get action and emotion into them. I've spent a lot of time sketching animals, and so should you. Every sketch makes a later drawing that much easier and more natural for you.

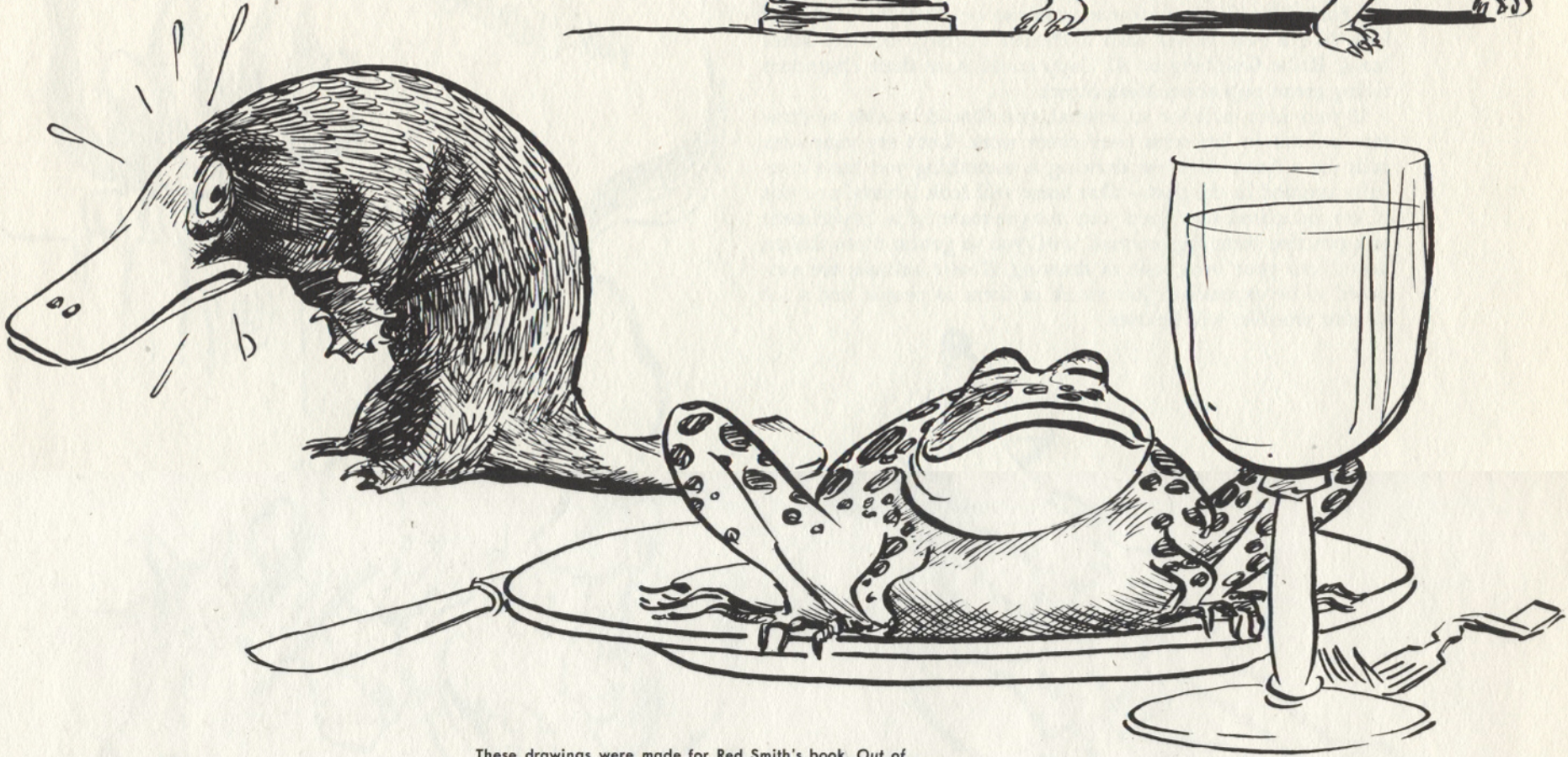
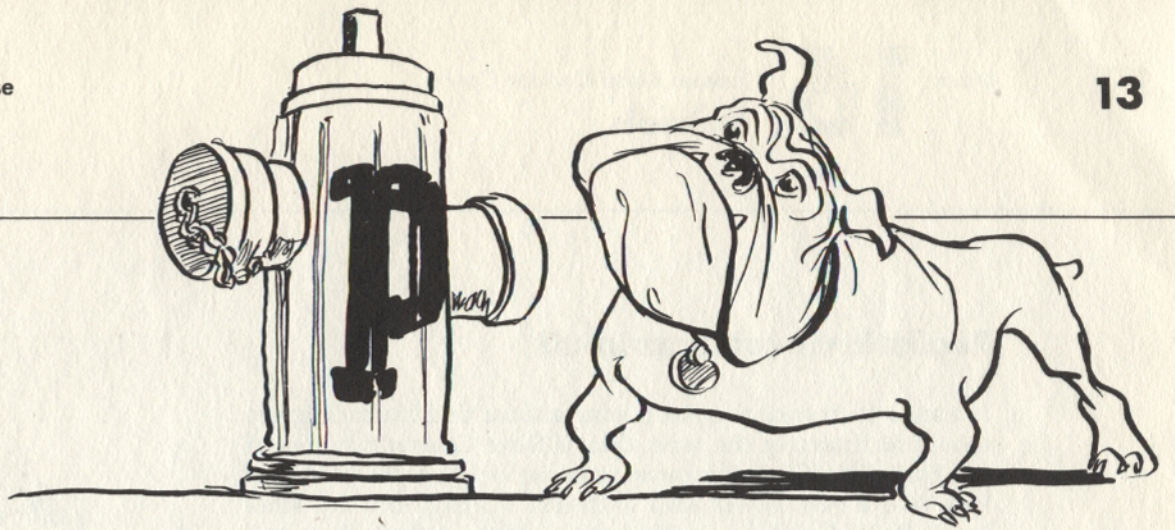


Some time ago the quality of the entries in one of the large handicaps was way out of line with the money the winner stood to win. It gave me a good chance to show the jockeys mounted on unlikely animals. Here again, past sketching paid off. These are some of the animals I used

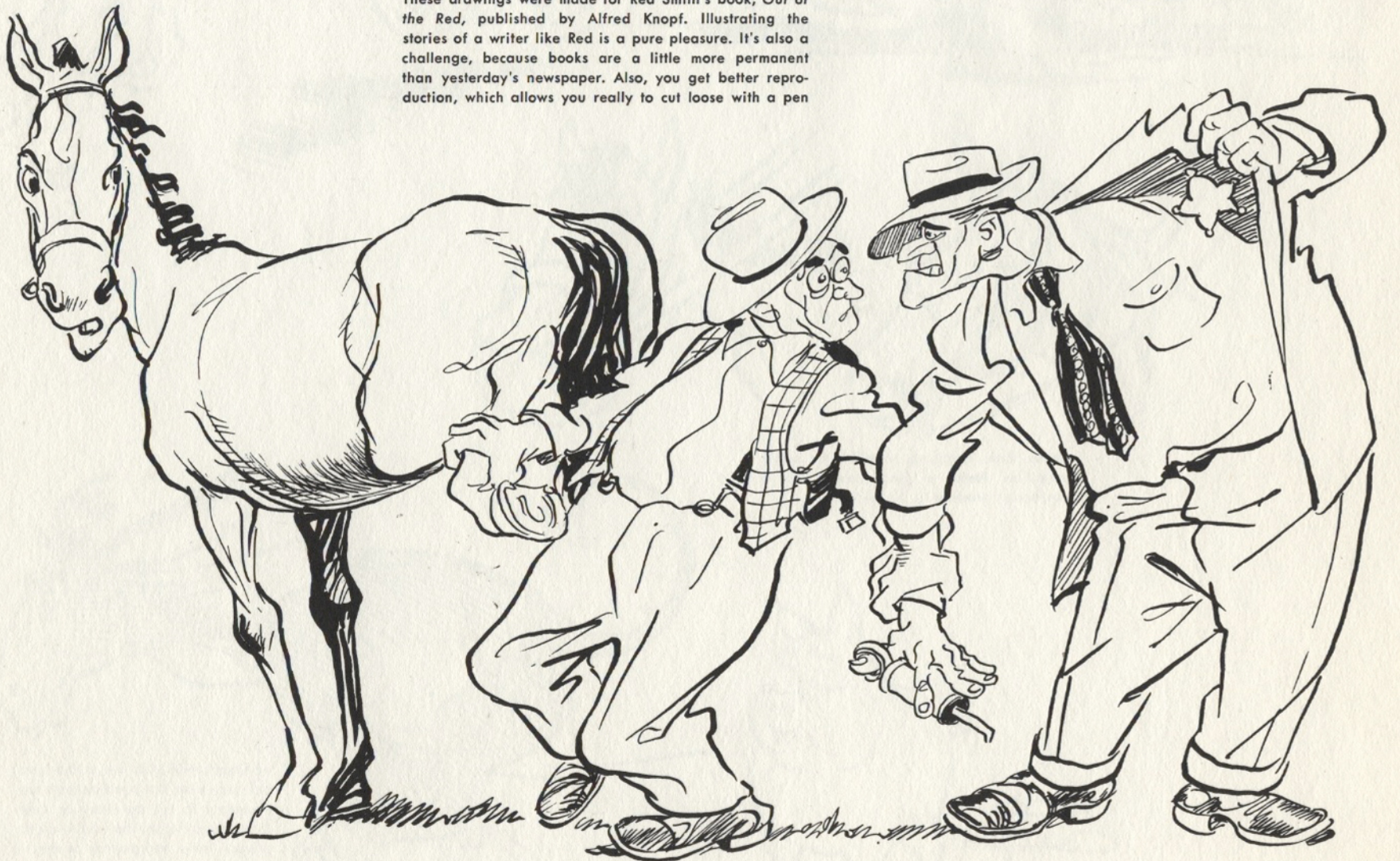


Animals don't have human feelings and reactions. But — it doesn't hurt the expressiveness of your cartoon beasts if you put a little human "feel" and motion into them

Michael Mullin



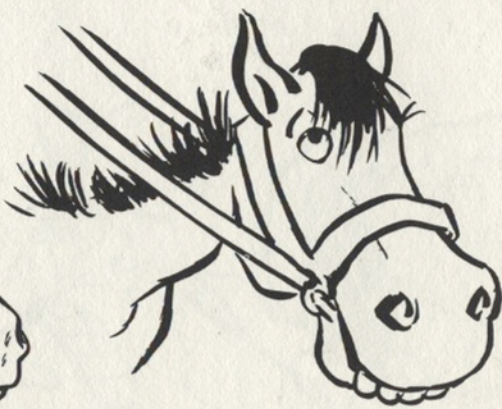
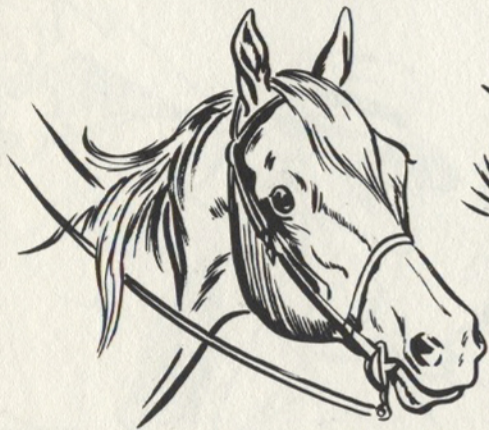
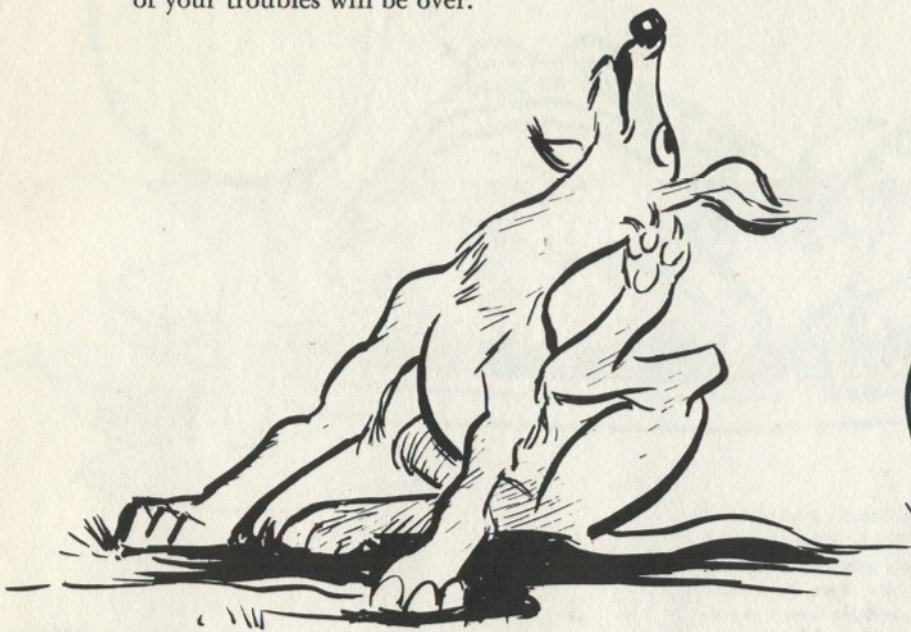
These drawings were made for Red Smith's book, *Out of the Red*, published by Alfred Knopf. Illustrating the stories of a writer like Red is a pure pleasure. It's also a challenge, because books are a little more permanent than yesterday's newspaper. Also, you get better reproduction, which allows you really to cut loose with a pen



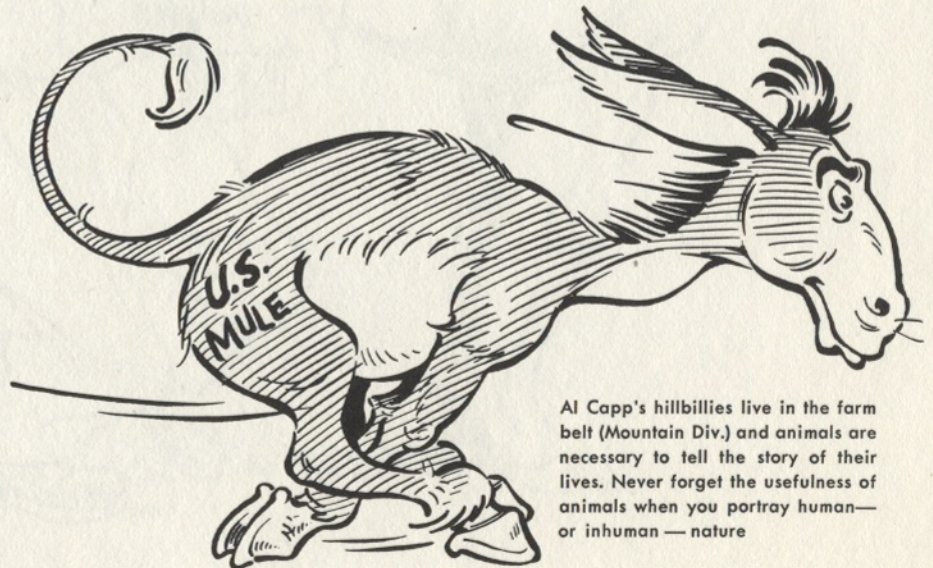
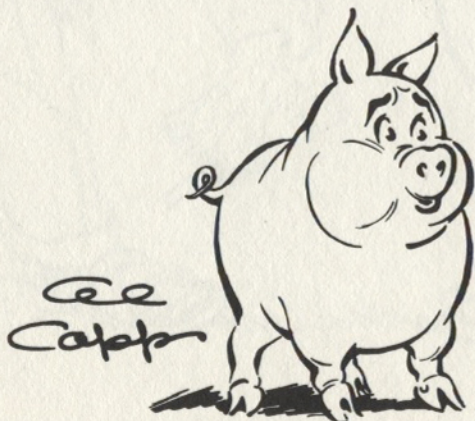
Realistic vs. comic animals

It stands to reason that both your animal and human figures should be drawn in the same style. If Steve Canyon rides out of the Forbidden City on a camel, you can bet that the beast will look like a *real* camel with authentic rigging. On the other hand, Rube Goldberg or Al Capp could have their characters riding green pigs down Main Street.

If your idea calls for an animal, you should be able to draw that animal *in key* with your other work. Let's say your idea calls for a horse. If horse drawing is something you have carefully avoided in the past — that horse will look labored and out of key, no matter how good your morgue material is. Experiment and practice sketching animals until you've gotten them shaken down into your own style of drawing. *Comic* animals are supposed to be expressive. Just think of them as people and a lot of your troubles will be over.



When Rube Goldberg simplifies he really simplifies. Here's a good example of a cartoonist drawing in his own style



Al Capp's hillbillies live in the farm belt (Mountain Div.) and animals are necessary to tell the story of their lives. Never forget the usefulness of animals when you portray human—or inhuman—nature



Never copy animals cold—use photos and drawings for anatomy and flavor — then DRAW YOUR OWN

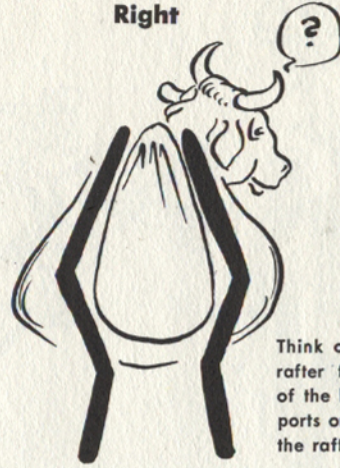
MILTON
CANIFF

A few important tips

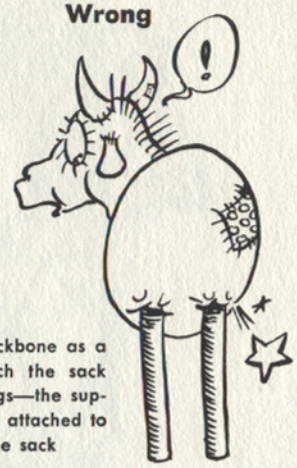
For some strange reason, nine out of ten cartoonists are stopped dead in their tracks when it comes to drawing a dog's hind leg. It's a sort of an occupational mental block. This page may help you overcome this as well as a couple of other little queeries.

The business of an animal body's weight *hanging* from the backbone is also something to tuck into your skull. It is true of every animal except man, and is one reason we poor mortals have to worry about our weight or go literally to pot.

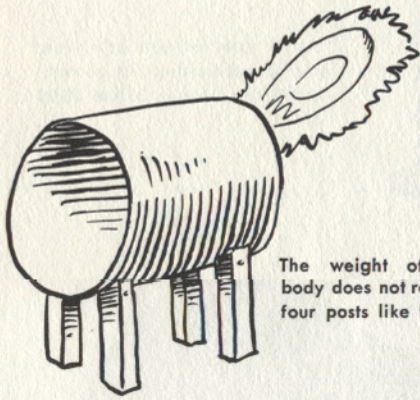
Right



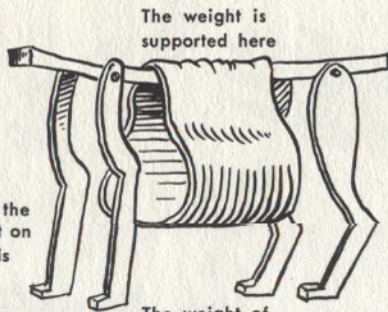
Wrong



Think of the backbone as a rafter from which the sack of the body hangs—the supports or legs are attached to the rafter, not the sack



The weight of the body does not rest on four posts like this

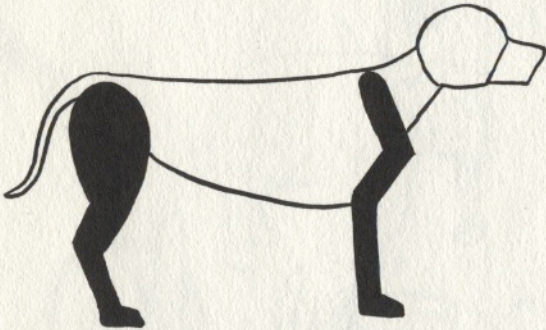


The weight is supported here

The weight of the body hangs



The basic shape of the rear and front legs (black) of all animals is the same. Again, only the proportions change

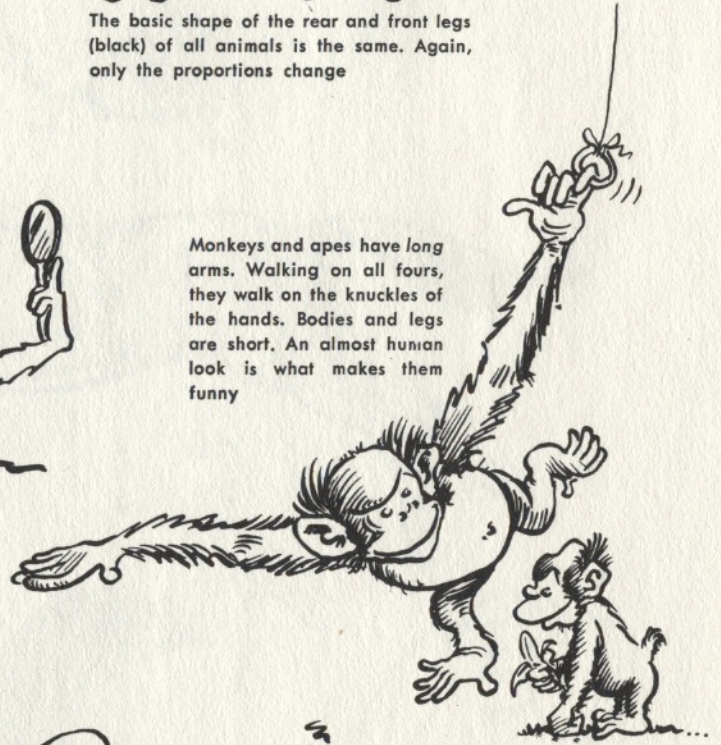


The basic shape of the side view of all animals' legs are shown blacked in. The changes are only in proportion

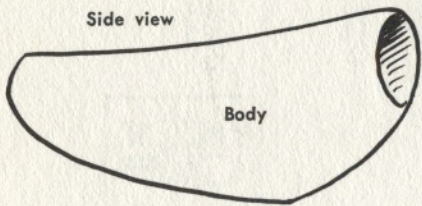


On a monkey's upper arm the hair grows downward, on his forearm upward. Look at your arms, buster

Monkeys and apes have long arms. Walking on all fours, they walk on the knuckles of the hands. Bodies and legs are short. An almost human look is what makes them funny

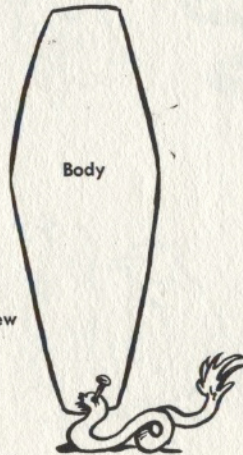


The animal body narrows at both ends to allow free leg motion forward and backward

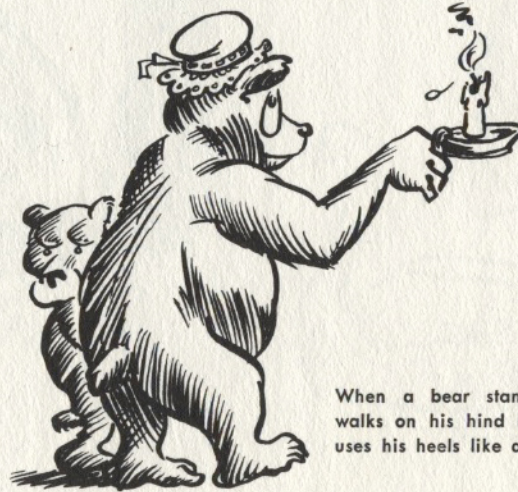


Side view

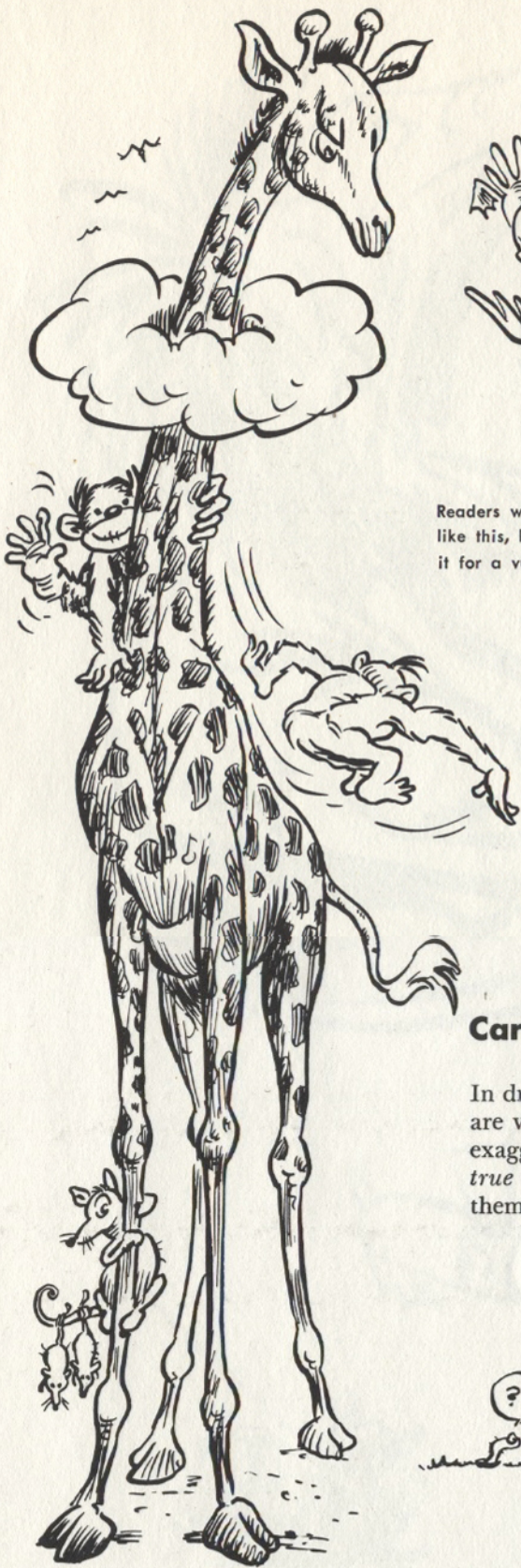
Body



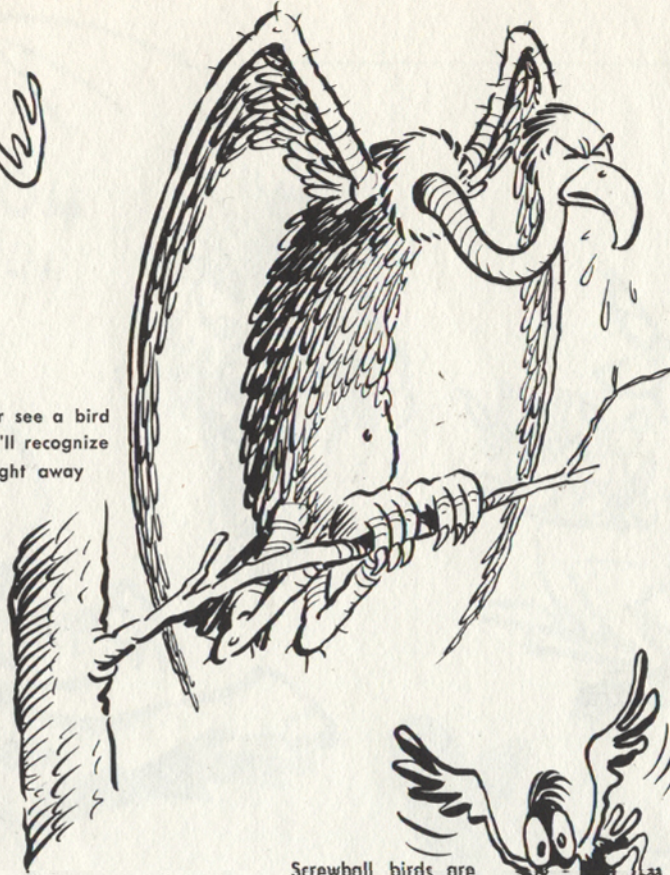
Top view



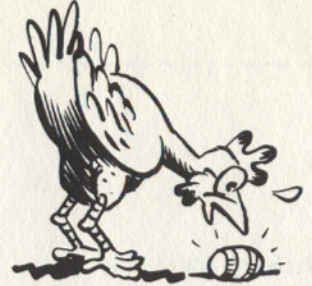
When a bear stands and walks on his hind legs, he uses his heels like a man



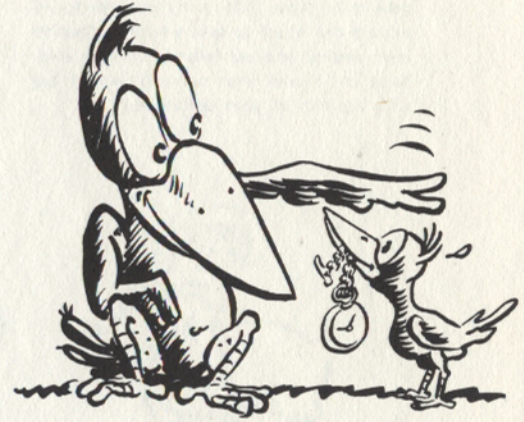
Readers will never see a bird like this, but they'll recognize it for a vulture right away



Screwball birds are nice grace-notes

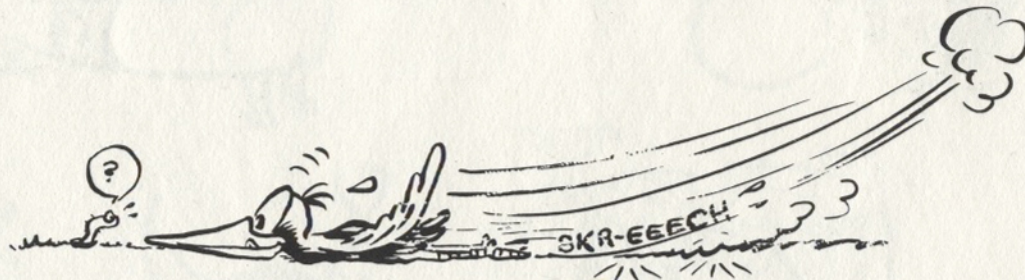
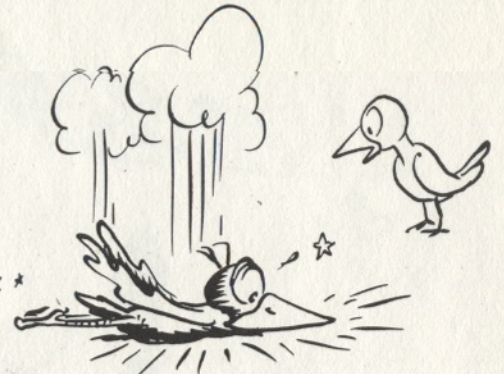


There are plenty of tips on human behavior to be found in the barnyard



Cartoon animals

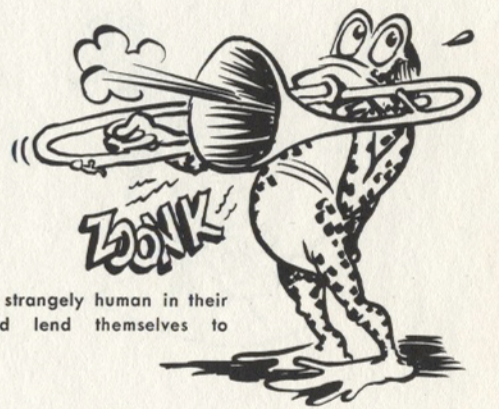
In drawing true-comic animals, as with humorous humans, there are very few rules to follow. You pick the features you want to exaggerate and go to it. However, the more you know of their *true* forms, the funnier they're going to look when you draw them for laughs.



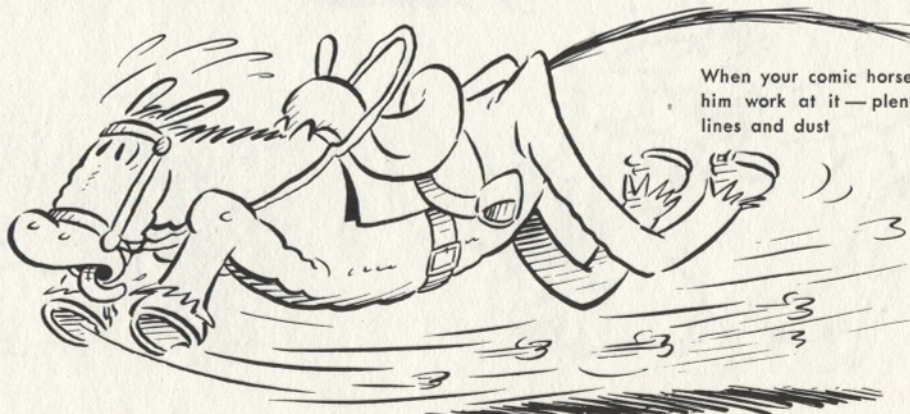
Fish are naturally graceful shapes, full of curves in action. Don't clutter them with too many small lines



These animals don't look much like their real-life models—but they're alive and full of action



Frogs are strangely human in their looks and lend themselves to fantasy



When your comic horse runs, make him work at it—plenty of speed lines and dust

FAMOUS ARTISTS CARTOON COURSE
Student Work
Lesson 16

To study and practice

In this lesson Harold Von Schmidt, one of the true masters of animal art, and the creators of your Course show you how to draw animals. What you get from all of them is a method of constructing the beasts. Learn your basic shapes and structure and build your critters not as flat, two-dimensional outline drawings, but as solidly constructed forms in many different positions and actions. Above all, practice until you know their form, and then go on to simplify them and put them into your own style.

Magazines are full of pictures of all kinds of animals. Clip them and save them in your morgue. Don't copy them -- just refer to them for shapes, proportions and details that will make your cartoon more convincing. See how much you can simplify the essential forms of the beasts and still keep their special character. Make a few lines do the work of many. A few well-chosen strokes will indicate the long hair of a shaggy dog better than a thousand careless ones. Try to give the animals different expressions -- they can show all the feelings that people do.

When we criticize your assignment drawing we will look, first, to see if you have given your animals solid form. Second, we shall want to see that you've given them expressive action. Don't draw your animals just standing around. Try to show their personalities and reactions to the situation as humorously or dramatically as possible. Exaggerate their emotions -- we want you to cut loose and have fun with this one.

The assignment you are to mail to the School for criticism

On a sheet of 11 x 14-inch Bristol board, rule and ink a panel 8 inches high and 10 inches wide. In it, using either pen or brush, create a cartoon involving one or more circus animals who have escaped and wandered into a barnyard. Indicate just enough background to set the scene, and be sure your animals dominate the composition. Draw in your own style and try to put the animals' actions and reactions across with a wallop.

Present your assignment in the same clean, professional manner you would use if you were submitting it to the cartoon buyer of a publication. Letter your name, address and student number carefully in the lower left-hand corner of the page. In the lower right corner, place the Lesson Number. Mail to:

FAMOUS ARTISTS CARTOON COURSE
Westport, Connecticut