OGS are getting smaller. Subject to style trends, the same as clothing, automobiles, and houses, they are adapting themselves—or, rather, being adapted—to the changed conditions of modern life.

People today are demanding dogs that can live in small homes or apartments, and ride in automobiles, without crowding out their human companions; dogs that can keep fit with a minimum of exercise; smart, good-natured dogs, and—an important consideration, sometimes—dogs that will not eat their masters out of house and home.

To meet these new requirements, breeders are applying scientific principles of heredity in bringing out the desired qualities. Already, the appearance and character of the nation’s dog population show the effects of their work—a modern version of the unceasing process which, in the past, has had such amazing consequences as the refinement of the popular Airedale terrier from a mongrel, the conversion of the strain of wolflike spitz into the little toy Pomeranian, and the development of the bulldog into an animal vastly unlike his bulldog ancestors of a century ago.

Largely as a result of the demand for smaller dogs, the Boston terrier, one of the only three breeds actually originated in the United States, today leads all others in American Kennel Club registrations. Next come three other small breeds, the cocker spaniel, the wire-haired fox terrier, and the Scottish terrier. As recently as 1926, the German shepherd, often loosely called a “police dog,” ranked first; but it is now in twentieth place, possibly because the depression made owners more conscious of the cost of dog food.

Through selective breeding, experts have been meeting the demands for smaller dogs, dogs which eat less and can be kept more economically; dogs which need less exercise, and therefore retain better health in cramped quarters. The motor age has restricted the exercise of dogs even more than that of men. It has created a need for breeds which remain in good physical condition when they are walked only on a leash, or exhibit definite marks of the German shepherd or the Airedale, whose popularity swept the country in recent years. There are numerous inheritances too, from the collie and the bull terrier, while the bird-dog influence is especially strong in the smaller communities. Early in the century, there were widespread traces of the fawn-colored, looptailed pug, but most of them have been lost in the engulfing tide of other blood.

A new dog, the affenpinscher or “monkey dog”

IMAGINE HIM IN AN APARTMENT!
Big dogs, like this Irish wolfhound, are out of place in the modern world. This fellow is nearly eight feet tall standing on his hind legs as shown.

A price-winning Sealyham, one of the smaller breeds of dogs that lately have won popularity at best in close company of their owners, instead of being allowed to run free. Thousands of motorists want dogs adapted to riding in cars instead of to loping for miles alongside horse-drawn coaches.

These changes, occurring now among pedigreed dogs, are by no means limited to that select group. Within a few years they will be reflected by the general dog population of the country. It is estimated that there are in the United States between 500,000 and 1,000,000 purebred dogs, and 15,000,000 or more mongrels; and nearly all their owners are affected by similar conditions.

The mongrels themselves gradually show effects of crossing with whatever pure breeds happen to be most numerous. Look around, and you will see that the “average” dogs today exhibit definite marks of the German shepherd or the Airedale, whose popularity swept the country in recent years. There are numerous inheritances too, from the collie and the bull terrier, while the bird-dog influence is especially strong in the smaller communities. Early in the century, there were widespread traces of the fawn-colored, looptailed pug, but most of them have been lost in the engulfing tide of other blood.

A new dog, the affenpinscher or “monkey dog”
How Breeders Are Changing
The Appearance and Nature
Of Our Canine Population
To Bring Out the Qualities
That Are Made Desirable
By Modern Living Conditions

By

JESSE F. GELDERS

Being no snob in the matter of dogs myself, and having an equal fondness for pure-breds and others, I inquired of Kennel Club officials why every cross-bred is termed a mongrel. The distinction, I learned, is based not on snobbery, but on scientific fact.

When pure-bred dogs of the same breed are mated, the puppies are like the parents. But when two different breeds are crossed, even though both dogs are of the purest strains, the characteristics of the puppies cannot accurately be foretold.

A breeder told me of the chance mating of a Scottie terrier and a hound, from which five pups were born, with ears like hounds and bodies like Scotties. What their puppies would be like, nobody could guess. For when mongrels are mated, even two mongrels of exactly the same appearance, their pups may be entirely different, taking a new combination of characteristics from their ancestors. Once there is a mixture, only long, careful breeding can sift out and stabilize any definite type.

Heredity is so certain to play pranks, that kennel clubs refuse to register any dog as a pure-bred unless its ancestors are known for three generations. On the rare occasions when a new breed is to be recognized, proof is required that there has been no variation from the proper type, either in three generations of direct ancestors, or in any pup born in the same litter with any of them.

Breeders seeking dogs of new types for definite new purposes usually have a choice of two procedures. They may cross breeds, as a chemist compounds elements to obtain a new material, but this is a long and uncertain task. On the other hand, they may "refine" an already existing breed, taking dogs which are a little closer than the average to the type they want, and continuing the selection until the entire strain takes on the new, desired qualities.

By such processes, the Scottie has changed his appearance in the last twenty years, developing a more profuse coat, a squarer head, and a shorter body.

The cocker spaniel, originally a hunting dog and one of the first breeds in the American colonies, has since been bred smaller as a pet, and is now being guided back to greater size again, to be used for hunting.

The bench-show setters, bred for their looks, have changed so greatly that they almost have the appearance of a different breed from the field-trial setters, developed for speed and good noses.

Even before the principles of heredity were studied scientifically, breeders unconsciously made use of them, by patiently selecting dogs with the traits they desired to reproduce.

There was the case of Polaris, the North Greenland Eskimo dog, whose sled-pulling ancestry gave him such an aptitude for the work that on his first introduction to the harness he pulled a heavy sled three miles through deep snow.

The breeder of sheep-herding collies developed such intelligence in the animals that a dog could go alone and select his master's sheep from the others grazing in the hills, bring them home, and separate the rams from the ewes and lambs before driving them to their quarters.

The short-legged Welsh corgi was bred to do a job of a different sort. He scurried his master's cattle on the public grazing ground by nipping at their hocks, and when they kicked he had to dodge. In this risky work, his low stature often saved his life. With intelligence specially cultivated for (Continued on page 120)
SCIENCE REMAKES THE DOG

(Continued from page 43)

his task, he knew when to go into action and when to stop, by the tone of his master’s whistle.

Among the strangest characteristics cultivated for purposes of his many hunting instincts; those of the Afghan hound, brought to America a few years ago, but used for many centuries as a hunting dog in the mountains of Afghanistan. While running, he finds that many other hunting hounds have come under the influence of his near relatives; he has bred him to carry his tail high, like a flag, which his master could see above the concealing bushes.

Even more fascinating than the shaping of traits in individual breeds of dogs, has been the creation of new breeds by crossing, for special purposes. Tremendous care was required, to select offspring with just the right inheritances from each stock.

BREEDERS of Chesapeake Bay retrievers, desiring to improve their scent, crossed them with hounds, but were able to preserve the chief characteristics which they had inherited from their other ancestors, supposedly curly-coated retrievers which had been mated with two Newfoundlands dogs taken from a wrecked ship. After a thorough, almost waterproof coat, which the hound had been bred to withstand severe storms and work in water chilled by frost.

The Chesapeake share with American foxhounds and Boston terriers the distinction of being the only breeds originated in the United States. They were said to have been developed by George Washington, who, to obtain a faster breed, crossed English foxhounds with French hounds given her by General Lafayette.

Boston terriers represent another success of breeders in obtaining just the desired characteristics from a parent stock, this time the English bull terrier. Crossing it with the white English terrier, they obtained the bulldog type of head on a dog smaller and more agile than the bulldog. By that time the bulldog had been cultivated into a good-natured though still courageous animal, and those qualities were preserved.

Strangely enough, a similar set of ancestors produced the bull terrier, a very different dog. This time, the breeders wanted a fighter, so they chose the bulldog. They crossed him with the black-and-tan terriers and white English terriers, producing a heavy-set, short-legged, fawn-colored dog. By careful selection they eliminated the short head and nearly all the other old bulldog qualities except the courage. The dog was crossed again with white terriers, and the white color, a recessive characteristic, was fixed, so that the dog became essentially the bull terrier we know today.

The bulldog himself was the result of careful breeding of dogs for the barbarous sport of bull baiting. The bulls which were to be killed were roped to stakes, so the dog did not have to chase, but only to disperse the bull’s ferocity. The heavy, powerful mastiff was crossed with other breeds, among them probably the bug, for a peculiar reason. The bull-baiting dog’s chief requirement was to hang on, when he caught hold, and the bug’s short nose enabled him to breathe without letting go.

With this, the bull-baiting dog, and the bug, began to be cultivated with two oddly contrasting aims. The ferocity was bred out, but until he became a really kindly beast, but at the same time, his appearance was encouraged to such an exaggerated extent that it often interfered with his health. Breathing frequently was an effort for him, even in repose; and his lower jaw protruded so far that he often had trouble chewing his food, making him a prize example of unwisely directed heredity.

Like a bug, the Airedale terrier had his origin in a questionable pursuit. Not only was he for a considerable time a mongrel, but he served as the helper of poachers on forbidden preserves. The dog, which was trained to follow the scent at night, and wanted dark-colored dogs which would not be conspicuous, and which hunted without baying. They crossed old English terriers with hounds, and then Irish terriers and bull terriers, until finally the present type was evolved and stabilized.

CHANGES in the occupations of other dogs, as strange as the reformation of the Airedale and bulldog, have been effected by skilful crossing. The pointer, today's widely used bird dog, was employed 300 years ago in England for finding rabbits to be chased by greyhounds, which hunted by sight.

Breeders crossed the English pointer with Spanish dogs, to get the superior "pointing" ability of the latter, but they bred out the foreign dog's other characteristics, as inferior to the native's. The original pointer stock is believed to have descended from "setting spaniels," greyhounds, foxhounds, and bloodhounds. Later, to produce a dog with the scent of the pointer, the dogs were crossed with setters.

The English setter's ancestry, quite curious, includes the Spanish pointer, along with several types of spaniels. The setter himself had started work as a hunting dog long before the advent of firearms; he located birds and crouched while nets were drawn over them.

The English sportsmen's desire for a dog to chase the fox out of his hole, resulted in the development of a new breed, the falcon, to produce the popular smooth-coated fox terrier. Many experts believe the little animal carries the blood of black-and-tan terriers, beagles, greyhounds and the blood of important heritages in alertness, scent, speed, or courage from each.

Another little dog, descended from different stock, became the wire-haired fox terrier. It was crossed with the smooth terrier, to get symmetry and white coloring, but the breeders were careful to retain the rough coat.

Almost as frequently as new breeds have been created, old ones have disappeared or suffered severe declines. One of the most famous hounds in history and perhaps the largest, degenerated and almost disappeared, was the Irish wolfhound, one of the most famous hounds in history and perhaps the largest, degenerated and almost disappeared, was the Irish wolfhound, which he thought were of the same breed. Then he crossed them with Great Danes and Russian wolfhounds, until once again the Irish wolfhound became the tallest known standing dog as high as thirty-six inches at the shoulder.

Many other dogs which have become extinct, almost as short a time as new breeds in the making of which they had a part. The black-and-tan, or "rat terrier," for example, whose unceasing temper cost him his home in Ireland, and was driven from it by his many friends, still flourishes today in a transformed and reformed state, as a part of the Boston, the bull terrier, the fox terrier, the strike dog, and the German dog catcher (first bred by a German dog catcher) and in many other popular breeds.

Changing tastes and living conditions which so often dictate the end of a dog as a type, frequently make a new place for a part of him—and it is the job of the skilful breeder to see that the right part is saved.