

# The Arabian Horse

*John W. Britton, D.V.M.\**

COINCIDENT with the increasing interest in light horses during recent years, the Arabian horse has assumed an important role in the development of this industry in California. His versatility, endurance, docility, and romantic history have appealed to many breeders and owners and the demand has far exceeded the supply. At present California has nearly four times as many owners of registered Arabians than any other state. The vast majority of these owners have from one to two Arabs maintained either for breeding or pleasure purposes. In addition there is an ever increasing number of farms devoted to the breeding of purebred Arabian horses, headed by the famed Kellogg Institute at Pomona now maintained by the U. S. Remount Service. The scarcity of the product in relation to the demand has served to keep the sales price at a highly satisfactory level as far as the breeder is concerned and as a result one is frequently consulted for veterinary service on Arab horses which would be neglected on less valuable animals.

## **Heredity**

Because of the many exaggerated ideas held about the Arabian horse arising from his romantic background, one of the principal services to be rendered by the veterinarian to the owner of an Arab horse is to explain some of the false impressions held by many about these animals. For example, it has long been maintained that the Arabian has one less lumbar vertebra than other breeds. Thus, when a Morgan horse was found with only five lum-

bar vertebrae instead of the more usual six, this was held as indisputable evidence that Justin Morgan was of Arabian descent. Other Arabian enthusiasts stoutly maintain that the lack of a single vertebra is the reason for the short back and extreme weight-carrying capacity of the breed. Such claims are considerably dampened by reminding the orator that all horses of all breeds have seven cervical vertebrae, yet the difference in length of neck is indisputable. Cold, scientific, unromantic fact as recorded by Sisson teaches that there are rarely seventeen thoracic vertebrae, frequent reduction of the number of lumbar vertebrae to five and from 14 to 21 coccygeal vertebrae. Sisson does not state the breed of horses used in this work; however, it can be regarded as highly improbable that a very large percentage were purebred Arabians. Finally, several Arabian skeletons have been authentically described with a vertebral formula equal to less royally bred equines.

Another common misconception about the Arabian horse is his ability to survive long periods without either feed or water. This belief, obviously stemming from his desert heritage, has led a few owners to be extremely negligent about the feeding and watering of their hapless charges, resulting in the usual mortal effects of starvation and malnutrition common to other breeds maintained under similar conditions. To cite the easy keeping qualities of an Arabian horse one breeder maintained a mature 1100 lb. stallion for 31 days on a daily ration of 12 lbs. of grass hay, 4 lbs. oats and 3 lbs. bran. During the month he was kept off pasture and

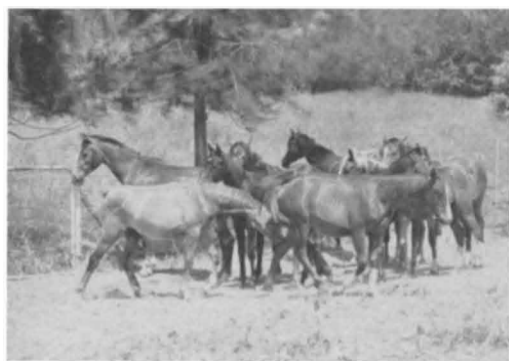
\*University of California, College of Agr., Davis, Calif.

ridden daily to approximate the conditions under which a saddle horse is maintained. The horse gained five pounds during the test. Morrison's feeding standard for 1200 lb. horses doing light work consists of 16 lbs. grass hay and 6 lbs. oats. Thus, it can be seen that the particular Arabian in question performed favorably, though not outstandingly.

In contrast to the ballyhoo of circus ringmasters and traveling horse traders, purebred Arabians are not white, palomino or pinto colored. They are found in the various shades of chestnut, bay and gray with an occasional black or brown and very rarely pure white. Regardless of coat color, the skin is always dark.

### Longevity

Important claims have been made for the longevity and fertility of the Arabian horse. It is true that many Arabs reach their 25th birthday with little or no loss in vigor; however, it must be considered that by and large they lead an easy life. In a recent survey of the breeding records of 35 Arab brood mares conducted by



Some Arabian Yearling Stallions on pasture.

Prof. C. E. Howell of the Animal Husbandry Department and the author, the fertility was not so notoriously poor as that of the thoroughbred nor so fantastically perfect as that reported for the wild horses of the western plains. These 36 mares produced only 17 dead or diseased foals in the 16 years covered by the report. However, irregularities in the estral cycle were rather commonly encoun-

tered. In general it can be stated that the fertility of the Arabian horse is good.

### Unsoundnesses

Some Arab enthusiasts have claimed that the Arabian horse is free from many of the common unsoundnesses such as roaring, heaves, spavin, ringbone, sidebone and so forth. No figures are available to support such a contention and the author knows of at least three Arabians with spavin, a half dozen with ringbone, and at least one that has such an inspiratory dyspnea as to make a diagnosis of roaring at once apparent. The Arab is noted for hard, dense bone and strong tendons. During the U. S. Army endurance rides Arabs and grade Arabs furnished the highest percentage of horses finishing and had the lowest percentage of leg trouble of any of the competing breeds. The tests consisted of 300-mile rides with the horses carrying 225 to 246 pounds, amounting to almost one-third of the weight of some of the Arab entrants. In an endurance ride of 40 miles conducted in the Netherlands in 1935, an Arab stallion carrying 248 pounds covered the distance in 3 hours 16 minutes with 26 minutes taken up in three halts. His condition was described as perfect at the finish by a board of veterinarians and he showed no increase in temperature. The other 44 entrants, all of which showed much slower time, had temperature elevations of 4 degrees or more and all but 8 were rated as being in bad conditions at the finish. Such feats of endurance offer support to the claim that these little horses are great weight carriers and unusually sound of wind and limb.

### Resistance To Disease

In general the Arab horse has no more resistance to disease than any other breeds of horses although one many times gains the impression that a sick Arabian puts up a gamer struggle for existence and responds to careful nursing more completely than do other breeds. Most veterinarians are familiar with big phlegmatic horses which fail to respond to treatment for painful, but not particularly serious, diseases and often simply give up and die

for no apparent reason other than lack of will to live. In contrast, many Arabians fight courageously to live and frequently succeed in spite of serious illness. The author has attended two Arabian mares with prolapsed uteri, parturient laminitis and metritis that seemingly recovered only because they never gave up. They respond to nursing so satisfactorily that this phase of treatment should never be neglected in handling any acutely ill Arab horse.

#### Use Today

This paper is not intended to depreciate the value of the Arab horse but rather to attempt to correct some of the more common misunderstandings about them. He is after all a horse and not some figment of the imagination out of the Arabian Nights. He is essentially a useful, versatile horse capable of many accomplishments. In California, Arabians are used chiefly as pleasure and working stock horses. In addition they are becoming increasingly popular in crossing on palominos and pintos to add style and quality to these colorful parade horses. The Arab should not be expected to compete with other more specialized breeds but rather should be considered in view of his merits of versatility and quality. Arabs have been raced considerably in England, France, Poland and Egypt and established the following records:  $\frac{1}{4}$  mile, 24 seconds;  $\frac{1}{2}$  mile, 51 seconds; 6 furlongs, 1 minute 18 seconds; 7 furlongs, 1 minute 32 seconds; 1 mile, 1 minute 46 seconds. These times do not of course compare with those established by the thoroughbred but they do indicate the speed of the Arab. Likewise, many Arabs have been trained to perform five gaits, but they obviously lack the extreme hock and knee action characteristic of the American saddlebred which has been bred for this performance for generations. Many Arabs possess the running walk which characterizes the Tennessee Walking Horse and in fact two Arab stallions have been officially approved for breeding purposes by the Walking Horse Association.

In summary, the Arab horse is a useful, sound, much maligned horse that suffers from all of the common contagious,

parasitic, metabolic, deficiency, hereditary and sporadic diseases encountered in other breeds. It is best to accept the Arabian horse as he is, neither expecting him to exist on sagebrush and sand nor to surpass other breeds in their inherited specialties.

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A histopathological study of specimens of cattle affected with endemic bovine hematuria revealed the following: The lesions are confined to the mucous membrane of the urinary bladder. The early damage results in hemorrhage and mild inflammation of the mucosal stroma. Later vascular channels form in the hemorrhagic areas, and finally develop to form hemangiomas. Two types of angiomas are described. One where the vascular channels are thin-walled and supported by connective tissue stroma, the other where endothelial activity has resulted in the formation of chordae that surround the canals and penetrate into the epithelial and muscular layers and to some extent destroy and replace them. Occasionally the angiomas extend above the surface of the mucosa and form pedunculated growths. These are covered with transitional epithelium continuous with that over the normal musoca.

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Paralytic rabies transmitted by the vampire bat has been observed in Brazil, Paraguay, Uruguay, and Argentina. During the past six years, a number of human cases were reported in Trinidad. The infection was acquired from the bites of infected vampire bats. These bats harbor the rabies virus in their salivary glands for a long period of time without acquiring the disease themselves.

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Within five years after the discovery that phenothiazine was effective for worming livestock, this synthetic coal-tar chemical became more widely used for worming than any other drug.

Phenothiazine is now worth \$10 million a year to the U. S. livestock industry. Yet the cost of the discovery of phenothiazine was only \$10,000—payment for the part-time work of three government scientists over a five-year period! Research pays!