

Questionnaire Study on Feeding and Managements of Rahvan Horses in Aegean and Marmara Regions of Turkey

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Horse necessity decreases day to day in the modern world but still race horse industries develop. Some countries have traditional horse races like Rahvan. Yorga horses walk in Rahvan style in Kirghiz region. Rahvan horses were breeding in Turkey from the Ottoman times. Nowadays, Rahvan breeding is common in Marmara and Aegean regions as a traditional hobby. Local races are arranged during the year by Non Governmental Organizations, municipality and federation supports. When Rahvan horse is moving, only sound of two steps is heard. The front and back feet on the right of the body move forward together, then the front and back feet on the left move forward together. It is like pacing but the steps are more rhythmic and quick. Riders and horses tire less than the other walking types. When we compare to the race horse industry, Rahvan breeding is very amateur and unique. The aim of this study was to learn about feeding and management practices of the Rahvan horses in Aegean and Marmara regions of Turkey. Target population of this study was Rahvan horses in the Turkey. To have the information about Rahvan horse feeding and management practices in the Turkey, a questionnaire which has 69 questions was designed. The questionnaire was divided into four sections (General information of breeders, farm conditions, feeding habits, nutritional diseases). 40 of the 69 questions were consisted of multiple choices and yes/no questions, 29 were open ended questions (feeding materials, number of the animals etc.). Web based questionnaire software (Google® Docs) was created for the online surveys. With the print outs of the survey, personal interviews were done on 31 August 2014 Golcuk Rahvan Races. Questionnaire was shared with e-mails and social platforms about Rahvan Horses. Questionnaire was online for 10 months. Rahvan horses' breeder and horse population records are not clear. Number of the breeders and horses were estimated by personal communications. Data were downloaded as Microsoft Excel© and evaluated in SPSS 22©. Evaluation was done according to frequencies and percentages. Questionnaire was completed by 50 horse owner from Aegean (62.0%), Marmara (38.0%) regions. 60.0% of the respondents were experienced more than 10 years in this industry. 72.0% of the horse barns contained 1-5 horses. Major source of energy met from oats. Main diets contained alfalfa (60.0%), pasture (56.0%) and oat hay (48.0%). Respondents generally (86.0%) separate foal and mother after 6 months. According to owners average feed consumption of an adult horse is 50 kg/month. They feed horses commonly (56.0%) two times a day. 52.0 % of the owners disburse 0-5.000 TL for feed materials in a year. 10.0% of respondents use corn silage. 26.0% reported that they turn out in all seasons, while the others turn out horses except winter. They usually (76.0 %) prepare concentrated feeds and soak oats and barley (60.0%). Owners reported that, usually they do not use oil (78.0%) and feed additives (84.0%), but they give fruits regularly (68.0%). Respondents never medicate (30.0%) or medicate once in 3-6 months (58.0%) with antiparasitic drugs. 46.0% of the respondents do not rasp their horses' teeth. There are few studies on Rahvan horses in Turkey. This survey presents primarily information about feeding and management practices of Rahvan horses which are one of the heritages from Ottoman to us. To understand these horses, we need more scientific studies and clear data. Owners should be informed about animal welfare and nutrition. Good genetic resources should be protected and reclamation studies performed for this heritage's future.

Keywords: *Equine nutrition, rahvan horse, nutritional diseases, pace horse, Turkey, yorga horse*

Figure-1 Preferred nutritive condition of Rahvan horses.

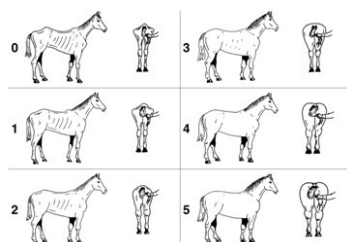


Figure-1 50.0% of the respondents preferred nutritive condition score (NCS) 3, 26.0% preferred NCS 2, 24.0% preferred NCS 4.

Table-1 Feeding materials' usage (percent).

Animal	Feeding Material	Frequency	Percent
Foal	Fabric feed	5	11.9
	Barley	9	21.4
	Oat	19	45.2
	Maize	1	2.3
	Bitter Vetch	1	2.3
	Tare	1	2.3
	Bran	3	7.14
	Hay-Turn out	42	100
	Bagasse	1	2.3
	Vitamin Mineral Premix	4	9.5
Mare	Fabric feed	2	8.3
	Barley	3	12.5
	Oat	15	62.5
	Hay-Turn out	24	100
Pregnant Mare	Fabric feed	6	18.7
	Barley	10	31.2
	Oat	21	65.6
	Bran	1	3.1
	Corn	1	3.1
	Vitamin Mineral Premix	1	3.1
Stallion	Fabric feed	5	17.8
	Barley	2	7.14
	Oat	7	25
	Hay-Turn out	28	100

Table-2 Colic reasons according to respondents.

Cause	Frequency	Frequency
No comment	1	2.0
Drinking water after work or journey	37	74.0
Over feeding	32	64.0
Gastro intestinal parasites	16	32.0
Contaminated feed with other animal's feces	1	2.0
Rotten, mouldiness and bacterial contaminated feed	36	72.0