

03. ANIMAL WELFARE

PZP VACCINATION ON A FREE ROAMING FERAL HORSE POPULATION FOLLOWING INDIVIDUAL CHEMICAL IMMOBILISATION AND REMOTE BOOSTER: IS IT FEASIBLE?O. Rosu¹, A. Birtoiu¹, D.G. Ignat², F. Schwarzenberger³¹University of Agronomic Sciences and Veterinary Medicine Bucharest- Faculty of Veterinary Medicine, Reproduction, Bucharest, Romania²Vier Pfofen Romania, Stray Animal Care, Bucharest, Romania³University of Veterinary Medicine Vetmeduni Vienna, Biomedical Sciences - Endocrinology, Vienna, Austria

Until 2011, the management of our study population consisted of frequent round-ups for slaughter. Those activities were cruel and actively condemned by the public.

The objective of this study was to assess the outcome of a PZP immuno-contraceptive program in a free ranging feral horse population (n=530) in the Romanian Danube Delta.

Specifically, the feasibility of PZP administration to individually immobilized mares, marked identification for later remote booster application by dart gun was tested. For the PZP contraception program a total of 150 mares were chemically immobilized, marked, and vaccinated.

Mares were divided into a PZP treatment and into a control group.

The mares in the **treatment group** (n=101) were vaccinated and then partially boosted (n=49) with PZP during October 2013-May 2014.

From this group, freshly dropped fecal samples of 41 individuals were collected after 12 -15 months (in Dec 2014 - May 2015). During this later period, 49 additional mares were immobilized. These mares were used as a **control group** for endocrine pregnancy diagnosis and blood and fecal samples from n=38 mares were analyzed. Samples were tested for estrogens and 20a-OH-pregnanes to assess for pregnancy rates. The pregnancy rate of the PZP treated mares was 14,6% as compared to 81,5% of the control group, although 44% of the mares did not receive a booster injection.

We conclude that a PZP contraception program through individual immobilization followed by remote booster administration is a feasible alternative solution to the traditional stressful roundups.

		PREGNANT				NON PREGNANT				Total no. of adult mares tested	Total no. of mares tested including immunised juveniles
		Clear		Likely		Clear		Likely			
TREATMENT GROUP PRE PZP (1st Season)	Samples pregnancy assessment	Clear		Likely		Clear		Likely		85	
	No. of mares tested pre PZP	48		9		27		1			
	Pregnancy rate	67 %				33 %					
TREATMENT GROUP POST PZP (2nd Season)	Booster delivered in 1st Season	yes		no		yes		no		41	48
	Samples pregnancy assessment	Clear	Likely	Clear	Likely	Clear	Likely	Clear	Likely		
	No. of mares tested post PZP	2	0	4	0	19	2	12	2		
	Pregnancy rate	14,6 %				85,3 %					
	Juveniles	0		0		1		6			
Pregnancy rate including juveniles	12,5 %				87,5 %						
CONTROL GROUP (2nd Season)	No. of mares tested	30		1		6		1		38	
	Pregnancy rate	81,5 %				18,4 %					

