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SAVE Foundation wolf research and monitoring – 5th interim report

Wolf monitoring in the Świętokrzyskie (Holy Cross) Mountains region - 1st April 2015 till 31st January 2016

Methods and the area of monitoring

We have continued the systematic wolf survey in the entire region with a special focus on 4 areas of known wolf packs: Świętokrzyska Forest (PS , forest districts of Suchedniów and Zagnańsk), Niekłań - Bliżyn Forest (LNB , forest districts of Stąporków and Skarżysko Kamienna), Przysucha-Barycz Forest (PB, forests districts of Przysucha and Barycz) and Iłżecka Forest (PI, forest districts of Starachowice Marcule and Ostrowiec Świętokrzyski) (Fig. 1).

Between April 2015 and January 2016 we spent (in total) 67 days in the field. In all above-mentioned areas we searched for wolf tracks, scats and other signs of wolf presence by patrolling forest roads. We sampled fresh scats for further DNA analysis. In July - October we systematically attempted to stimulate wolves to howl in order to check for the presence of pups to confirm pack breeding. The stimulation was done at night, by 2 teams communicating on the radio (Pic. 1). We stopped vehicles 2-3 kilometers apart, howled simultaneously and listened to the wolf response. We repeated the procedure until the entire forest complex was covered.

In the winter 2015/16 snow cover appeared in the first decade of January. This enabled us to estimate the size of packs by following the fresh tracks on the snow. As in the previous periods, the field work was supplemented by the information received from the Forest Service, hunters and others.

Status of the monitored packs

In total we noted 106 records of wolf presence, which included tracks, scats, spontaneous howling, howling responses and visual observations. We recorded the presence of wolf packs in four locations - PI, PS, LNB and PB, but the howling pups were heard only in two of them – PS and PI.

PI Pack

The PI pack responded to the howling stimulation twice: on 17th of July and 8th of August 2015. In both cases, there were pups howling together with adult wolves.

In July we were able to distinguish the voices of 2 pups and 5 adults, however in August there were 4 pups and 2 adults heard. In both cases the pack was responding from the same location, apparently the rendezvous site. This is the third confirmed consecutive reproduction of the PI pack. We searched the place from which wolves howled later in winter and recovered wolf den (Pic. 2). During the winter we recorded the simultaneous trails of maximum 6 wolves.

From Patryk Molik we received information that wolves killed a roe deer and howled 10 km north of the major PI forest complex, near the Kopiec village. We suspected that they might belong to the PI pack or dispersed from the PI pack.

PS Pack

Wolves of the PS pack responded to the howling stimulation 3 times in July. In all cases the pack was heard from the same location, which was apparently the rendezvous site.

Two events of pups howling were noted. In the first event two voices of pups were distinguished whereas in the second – three. They were assisted by two and four adults, respectively. In the third event there was only an adult wolf responding.

We searched the site in September and found signs of the prolonged wolf presence – bones of prey, daybeds and wolf paths, but no den. The wolves from the PS pack were heard howling in 3 different locations by foresters (Tomasz Kuszewski and Michał Zygadło). In winter we recorded simultaneous tracks of maximum 4 wolves, however Krzysztof Król reported to have seen 5 wolves crossing the county road 0437T (Odrowąż-Samsonów) being the western border of Świętokrzyska Forest complex (Fig. 1). We recorded tracks of wolves in the Kamienna river valley, east of the express road S7 bridge on Kamienna. The forested passage under the bridge may serve as convenient place for wolves to cross the express road S7.

LNB Pack

The situation in the area very much remained the same as in 2014/2015. The pack did not respond to the howling stimulation despite of our intensive efforts in July, September and August. During the summer and fall we noted tracks of wolves in the area, although not very many and of no more than 2 wolves simultaneously, whereas in January 2016 we recorded tracks of 3 wolves on the snow cover which was the maximum number noted in the area.

PB Pack

During the summer and fall we attempted to stimulate the packs for howling although we received no response. We recorded tracks and scats, although not very many. In January 2016 we recorded the simultaneous trails of maximum 3 wolves .

WILKNet – platform for dissemination the information on wolf research and conservation in Poland

WilkNet is the cooperation of the Polish wolf researchers and conservationist supported by the SAVE Foundation by the means of web hosting and programming assistance. The platform was launched in the beginning of 2015 to consociate several wolf research and conservation projects, and leading wolf researchers. The idea is to disseminate science-based wolf knowledge among general public. The goal is achieved by publishing short, informative news from the projects followed by photos, graphs and maps. Usually each note is focused on a certain aspect of the wolf biology and backed with an observation or a summary of dataset. We believe that the platform will help to fill the gap in wolf knowledge, which is quite often one-sided and based on sentiments (either positive or negative) rather than experience. We hope to develop the platform so as to reach broader audience.

Wolf monitoring in Drawsko Forest

From July to October 2015 Katarzyna Bojarska used the yellow Land Rover in a project conducted by Western Pomeranian Society (lead by Maciej Tracz and Magdalena Tracz) in Drawsko Forest. The project's goal was to identify the areas of wolf occurrence and breeding, as well as to assess the number of wolf packs in Forestry Districts of Drawsko, Świerczyna, Mirosławiec and Wałcz. Thanks to photo-trapping, the project revealed existence of two wolf packs in Drawsko Forestry District. In the western part of this area, used by military forces as a training zone, a camera recorded a breeding female in July (Pic. 3) and a small wolf pup in the beginning of August (Pic. 4). The growing pups continued to be photographed throughout August (Pic. 5). At the same time, more than 15 km away in eastern part of Drawsko Forestry District, another camera trap repeatedly recorded two pups (Pic. 6). Pictures taken in September revealed that there were at least four pups in this pack (Pic. 7).

The wolf monitoring in Forestry Districts of Świerczyna, Mirosławiec and Wałcz was based primarily on signs of wolf presence, such as tracks and scats. We observed high density of signs of wolf presence in Wałcz Forestry District in summer, and forestry workers observed pups a few times, indicating the area of breeding is located there (Fig. 2). The density of wolf signs in Mirosławiec and Świerczyna Forestry Districts was much lower. The wolves occurring in those areas probably come from packs breeding in the eastern part of Drawsko Forestry District, Borne Sulinowo Forestry District, or other. However, in 2014 pups were photographed in Mirosławiec Forestry District.

Research on wolf ecology in the Lower Silesia Forest

We used the yellow Land Rover for field research in the frame of scientific projects conducted by the Institute of Nature Conservation PAS and Museum and Institute of Zoology PAS in the Forestry Districts of Ruzów, Wymiarki and Pieńsk. In 2015, we tracked wolves in the snow for 60 km (Pic. 8), we trapped

wolves to perform GPS telemetry (Pic. 9) and we field-checked 300 GPS locations of a wolf pack consisting of four individuals, including the female Orzechowa collared in January 2015 (Pic. 10). During snow tracking and checking the GPS locations, we collected 50 hair and 70 scat samples to investigate individual food habits of wolves. Additionally, we collected information on wolf prey, to assess the kill rate, species composition and sex and age structure of ungulates killed by wolves. We found eight roe deer, three wild boars and five red deer killed by the pack (Pic. 11). Among red deer, calves were killed the most frequently (three times), followed by young males. Wolves killed on average one ungulate every two days. Thanks to GPS telemetry, we located the site where pups were born and raised (Pic. 12). We found many places used by wolves for their daily and night rest sites (Pic. 13 and 14). Wolves regularly crossed the Polish-German border. The wolf GPS positions in Germany were often located close to livestock pastures, but no wolf-caused damage was reported at that time.

In January 2016 we trapped and collared a second wolf from Orzechowa pack. The young male, who was called Pumpak (in Lusatian “with large tommy”) is now being monitored by means of telemetry and GPS-tracking.

Acknowledgements

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Fig. 1. Results of the monitoring of wolves in the Świętokrzyskie Mountains region from 1st of April 2015 to 31st January 2016. Numbers of wolves given for each area are the highest recorded during snow-tracking, howling stimulation or spontaneous howling. PI – Iłżecka Forest, PS – Holy Cross Forest, LNB – Niekłań-Bliżyn Forest, PB – Przysucha-Barycz- Forest.

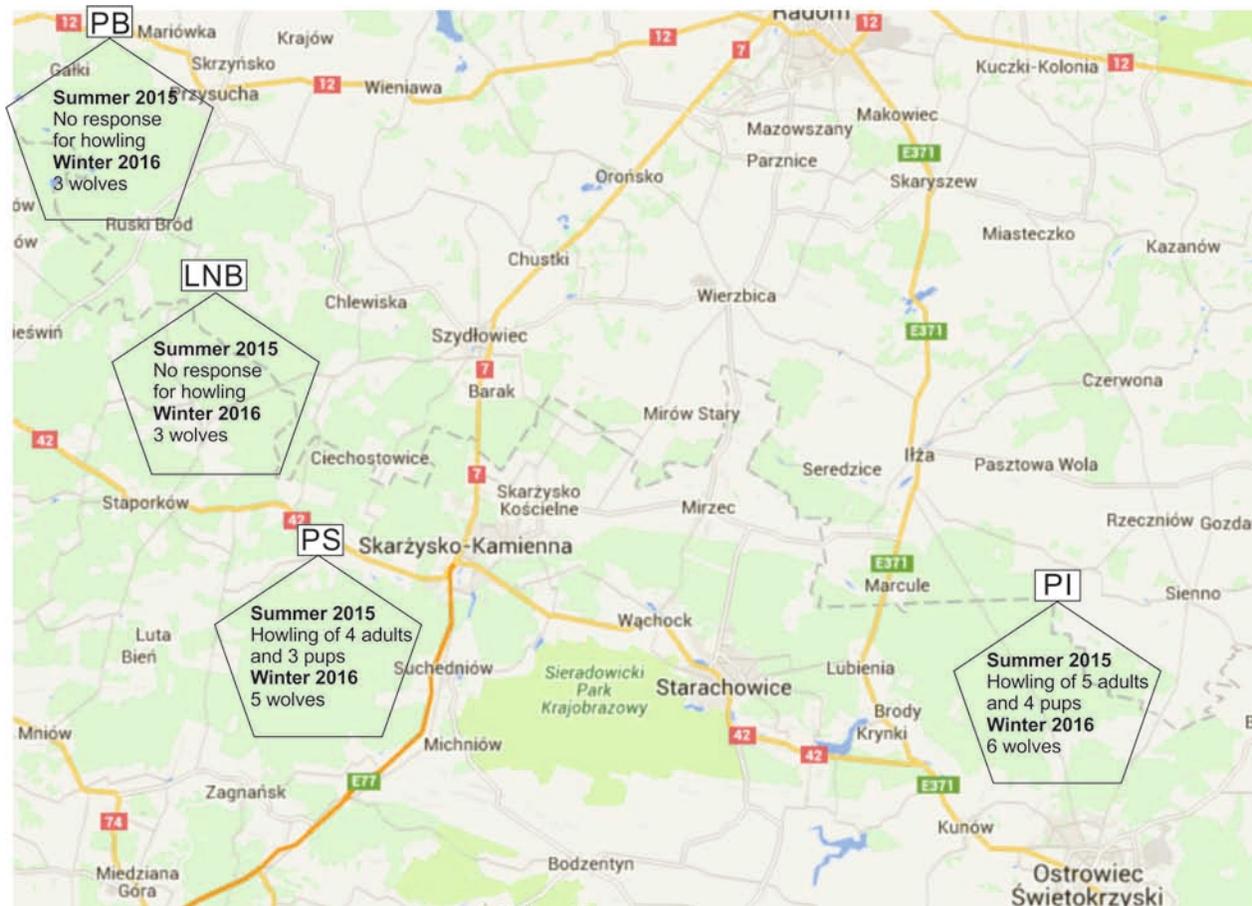
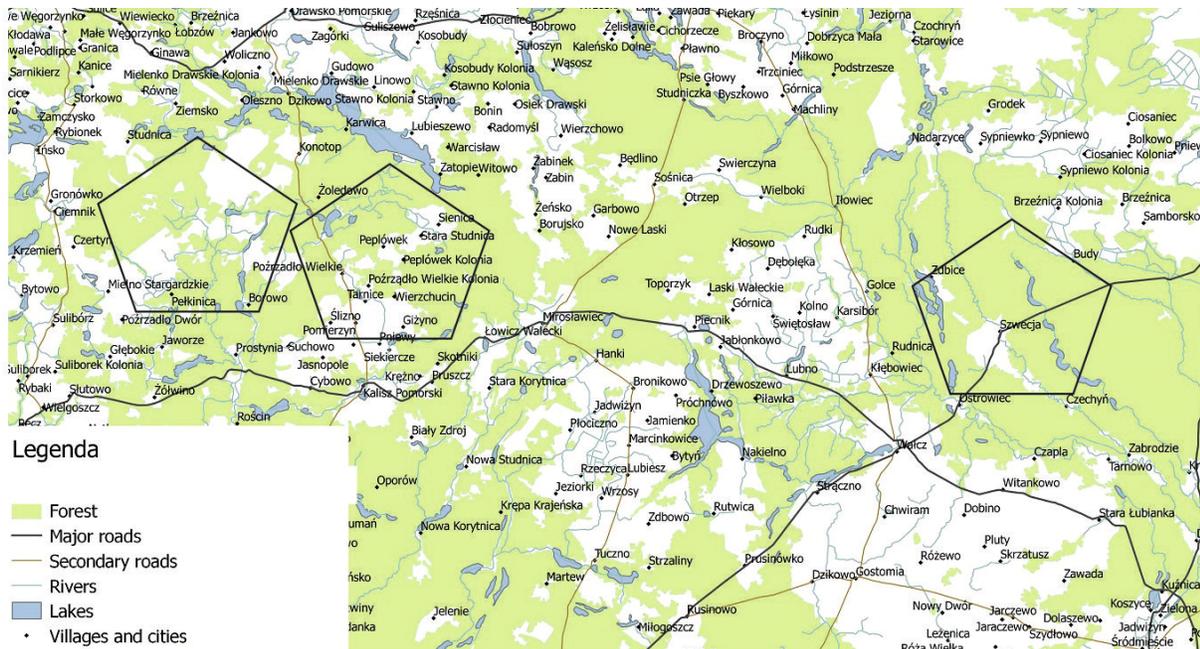


Fig. 2. Schematic locations of breeding wolf packs in Drawsko Forest in 2015.



Pic. 1. Artur Milanowski and Roman Gula during howling stimulation of wolves in Holy Cross Forest (PS) in the summer of 2015. Photo taken by Włodzimierz Płaneta



Pic. 2. Artur Milanowski at the wolf den site of Iłżecka Forest (PI) pack.



Pic. 3. Breeding wolf female in the western part of Drawsko Forestry District, July 2015.



Pic. 4. A small wolf pup in the western part of Drawsko Forestry District, beginning of August 2015.



Pic. 5. A wolf pup in the western part of Drawsko Forestry District, late August 2015.



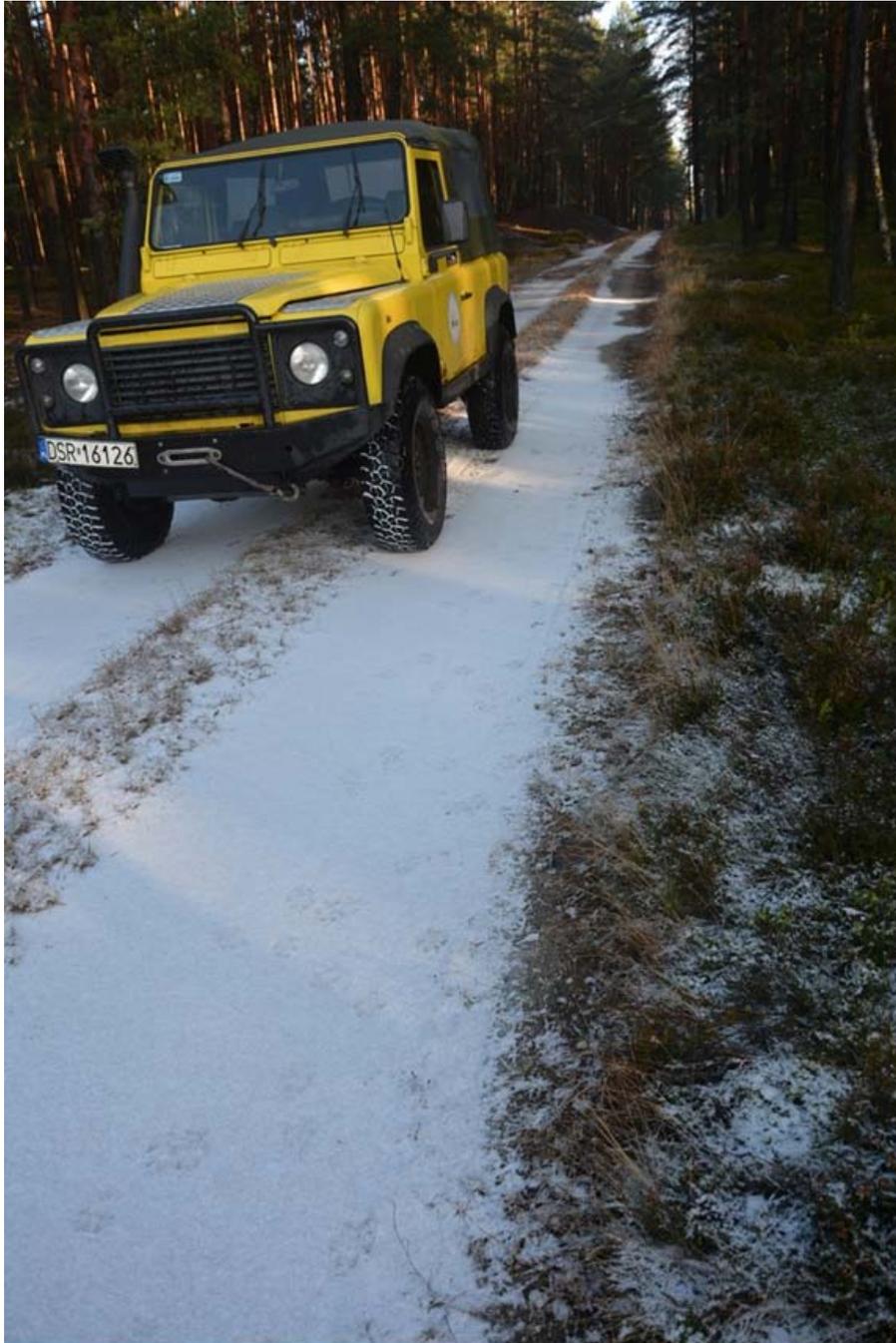
Pic. 6. Wolf pups in the eastern part of Drawsko Forestry District, August 2015.



Pic. 7. Four wolf pups in the eastern part of Drawsko Forestry District, September 2015.



Pic. 8. Land Rover during snow tracking of wolves in the Lower Silesia Forest 2015.



Pic. 9. Young wolf with a GPS collar, Lower Silesia Forest 2016.



Pic. 10. Katarzyna Bojarska when using VHF telemetry to locate the collared wolf, the Lower Silesia Forest, 2015.



Pic. 11. A young red deer killed by wolves near water, the Lower Silesia Forest, 2015.



Pic. 12. The place where wolf pups were born, the Lower Silesia Forest, 2015.



Pic. 13. A clump of hair at w wolf resting site, the Lower Silesia Forest, 2015.



Pic. 14. A place where wolves rested during the night, the Lower Silesia Forest, 2015. The fortifications from the II World War by the Lusatian Neisse River and Germany in the background.

