HCC mitigation component: Livestock Guarding Dogs

Distribution, aptitude testing and monitoring



Teimuraz Popiashvili

Dec 2011 – April 2012







Georgian Carnivore Conservation Project

Objectives

1. Deliver the pups at farms

The pups were taken from 'Bombora' office in Tbilisi on December 21. They were in special boxes. With pups we took their passports, bowls for food and water, toys and food. In Dedoplistskaro pups were taken outside for feeding and drinking water. On that day only 4 pups (Buta, Nord, Basara and Tuga) were delivered at farms. The females spent one night in Vashlovani ranger station and on December 22they were at farm. All six pups felt fine after trip, they ate and drank well. They were putted in previously prepared enclosures. Livestock owners were trained how to feed them.

2. Implement Aptitude testing

Aptitude testing was planned for three days after delivering the pups. We gave time to pups for adapting new environment as suggested by the LGD expert. Buta and Nord were tested on December 24 and others on December 25. The aptitude testing was not fully conducted. According to the test guidelines, the 5th part 'Response to livestock' needs to be implemented during the first meeting between pups and sheep. During both of our visits (for delivery and testing) no livestock were at the farm. In addition, the pups had already seen sheep because they were kept together at night.

3. Implement pups weekly monitoring

The original plan was to monitor pups twice in the first week and then once a week after that. We tried to maintain this schedule as much as possible but could not always due to a variety of reasons including harsh weather, bad road conditions as well as an absence of sheep at the farm.

4. Provide livestock owners with food and medicines for pups

According to a MoU between GCCP and livestock owners the project provides all needed medicines, vaccinations and food to the end of May. As recommended by Gia Giorgadze, 'Bombora, pups were vaccinated 4 times with complex vaccine, once on rabies and dewormed. Livestock owners were also provided with anti-flea deodorants. Each pup received three loads of 15kg 'Royal Canin' bags (Table7).

5. Puppies health

Although the pups had some small health problems the overall conditions of each were good during the whole period. During each visit to the farms Zaza, the HCCRT vet, checked the pups' health, and filling-in forms prepared by the LGD expert.

Characterizing pups by summarising the results of the aptitude testing and weekly monitoring

Pup name and chip number – Nord (268098100000593)

Sex - Male

Birth date - 21/10/2011

Farm - 26

Owner - Beso Gatsiridze



Aptitude Testing

Testing was conducted outside in front of the house on a flat area. Nord was tested at 9 weeks of age, one week later than the recommended period for testing (7-8 weeks). His score for parts I-II of the test varied from 1 to 4, but most popular point (50%) was 3. The description for such scores, according to the guidelines is:

<u>Easily accepts a human leader and obedience training.</u> Adapts well to new situations, has a "commonsense" approach, though may tend to be active.

Nord showed a high level of energy in the 'energy level' test. Although less active dogs tend to be better LGDs, Nord's high energy might help him during migration and guarding flock on open areas such as Vashlovani PAs.

He easily solved the barrier test. Once he ran towards a hole in a nearby wall but as soon as he discovered that it was too small for him he looked around and found an exit and came to observer immediately (See table 1 for details).

Table 1. Nord's points from aptitude testing

Test	Score
Part I – General Aptitude	
1. Social attraction	1
2. Following	3
3. Restraint dominance	4
4. Social dominance	2
5. Elevation dominance	3
Part II -Obedience Aptitude	
1. Retrieving	3
2. Touch sensitivity	1
3. Sound sensitivity	3
4. Chase instinct (sight sensitivity)	2
5. Stability	3
Part III – Energy Level	High
Part IV – Problem Solving	Finds exit, goes through immediately

(Date-28/12/2011; Age: 10 weeks; Weight: Not scaled) - On this visit Nord was kept in an

enclosure inside the corral opposite to Buta's enclosure and about 20 meters away. They both had water and food in bowls. As shepherds said Nord ate more than Buta and it is possible that it was here that he started increasing his weight. At the time of my visit there were not any sheep at farm. The shepherd didn't know where to find the flock and it seemed that usually there were not any sheep during daytime with pups.

I (Date: 8/01/2012; Age: 11 weeks; Weight: 12.6kg) –The pup was in enclosure inside corral. There was only one lamb with him but this was being



kept in a special enclosure for new born lambs. The distance between the lamb and Nord was about 15 meters; not close enough for testing. We tried to monitor the pup anyway. Both were taken from the enclosures to the corral. As soon as the dog saw the lamb he chased and tried to play with him. The lamb was afraid and tried to run away from Nord (see picture). After that Nord went to Buta's enclosure, smelled it and left. He didn't pay much attention to the observer. He looked happy to be free, was energetic and provoking the lamb to play. In the case of the lamb we can definitely say that it was very scared. One positive observation of Nord was that he didn't try to escape from the corral, despite there being several big holes in the fence.

II (Date: 22/01/2012; Age: 13 weeks; Weight: 17.3kg) – There was snow outside and Nord's enclosure was taken inside the barn. The enclosure was not close enough to lambs. We moved it so that pup had permanent visual contact with the lambs. For monitoring we took some lambs and Nord in another part of barn. Initially he was active, running around, approaching and withdrawing from the

lambs and observer. After 10 minutes he became quiet. Lambs were not afraid of him, staying in one place, and on Nord's approach they only moved their heads slightly. Twice he licked a lamb's nose and sniffed its anus. Both pup and lambs seemed to be comfortable in the presence of the other. The space was not very big inside the barn but the pup had opportunities to leave place but didn't.

III (Date: 4/02/2012; Age: 15 weeks; Weight: Not scaled) – Nord was inside the barn but not in an enclosure. The lambs were kept separately in their enclosures. When we visited the farm a small flock of lame sheep were close to farm. We herded them inside the corral and let Nord out



with them. Nord was not very active during the session. He was walking around the flock, smelling the soil. It may be that he was "patrolling" as he urinated in two places. Sometimes he approached the

sheep. They were not looking him and their ears were down. Once he licked a sheep which looked at him and didn't move. Only once Nord tried to chase the sheep but soon stopped with his own initiative. Once he heard Buta's barking and for about five minutes his attention was switched to Buta. Then he forgot about him and lay close to the sheep.

IV (Date: 12/02/2012; Age: 16 weeks; Weight: 20.2kg) — On this visit Nord was inside the barn in the lambs' enclosure (see picture). We took them into another part with more space. From the start of the session Nord started licking blood from cuts on the lamb's ears (shepherds cut the ears in order to identify them). For the most part, the lambs let him to do this but, sometimes they avoided him. Once Nord stopped and started barking, then he ran around the barn and returned to the sheep. After that he lay some distance (but with visual contact) from the lambs and stayed till the end of the session.

V (Date: 7/03/2012; Age: 20 weeks; Weight: Not scaled) –This monitoring was conducted on the pasture. Sheep was separated in several flocks and were grazing in different areas. Nord was the only LGD with one of these sub-flocks. When we visited them the flock was resting on the pasture and Nord was also lying under a tree. He remained here for the whole session, waking up only once when the

shepherd approached to wash his hands. It seemed Nord was thirsty; he went to the shepherd and drank some water then returned to his place in the shade to sleep. After that, the flock started moving. Only Nord and one sheep with new born lamb stayed. During the whole session we saw the pup sleeping, even after

Although Nord was lazy pup and could not follow the flock as well as Buta, Beso still liked him, thought that the pup is too young and he will be changed and became good LGD.

the flock had gone, though that maybe due to the presence of the sheep and newborn. Certainly, Nord seemed overweight and the shepherds often complained that he was lazy. On the other hand, he had followed the flock for some distance from the farm.

Pup's health problems and body conditions

In March Nord became fat and lazy. We didn't know which of these characteristics initiate the other one so we recommended shepherds to control food ratio and make the pup spend more energy. Nord preferred to stay at the farm while the other pup was with the flock (sometimes shepherds took the pups with flock in spite of our agreement).

In April, a car hit Nord. When I visited the farm I saw Nord lying near the road. When he saw the car he hardly moved, limping with his back right leg. I (Zaza was not with me) checked his bones and they seemed to be healthy. I noticed that pup didn't have water. When he got it he drank a lot. As shepherd said the accident happened the previous night. Nord heard a noise and ran to it, barking. Then the shepherd heard the puppy whine and went out to check Nord and bring him back to the farm.

Summary

Reviewing the character of Nord we can say that, whilst he does not seem ideal he doesn't show any extreme "bad" characters. During observation sessions he exhibited the kind of behavior that one might associate with an attentive dog. The fact that he seems to prefer to stay at the farm, rather than accompany the flock, might be connected to his weight. He seems to need stimulation to follow the flock but then will stay with them.

Pup name and chip number – Buta (268098100000255)

Sex - Male

Birth date - 25/10/2011

Farm - 26

Owner - Beso Gatsiridze



Aptitude Testing

The testing was conducted outside, in front of the house and on a flat area.

Buta was tested at 9 weeks of age, one week later than the recommended period for testing (7-8 weeks). Overall, he scored 4 to 6 points. His score was very low (1) only during the "touch sensitivity" test which is the most subjective because it depends on the tester's sense of time etc. The most common score was 4, which characterises the pup as;

Submissive and adaptable, slightly less outgoing.

On the other hand, the rest of the test results revealed him as;

shy, aloof and highly independent character. He doesn't like human contact and prefers more space.

Like his companion, Nord, Buta showed high levels of energy. In some respects, this may cause problems as a particularly energetic dog may bother the lambs or sheep. On the other hand, as long as the pups are raised properly high levels of energy may be of benefit during the migration or whilst accompany the flock on pastures.

Buta found the exit quite easily but did not approach the observer. He went out from the barn where this part of the test was implemented.

Table 2. Buta's points from aptitude testing

Test	Score
Part I – General Aptitude	
Social attraction	4
2. Following	6
3. Restraint dominance	4
4. Social dominance	6
5. Elevation dominance	6
Part II -Obedience Aptitude	
1. Retrieving	5
2. Touch sensitivity	1
3. Sound sensitivity	4

4. Chase instinct (sight sensitivity)	3
5. Stability	4
Part III – Energy Level	High
Part IV – Problem Solving	Finds exit, goes through immediately

(Date: 28/12/2011; Age: 9 weeks; Weight: Not scaled) – On this visit Buta was in his enclosure, in the corral. However, the sheep were not at the farm and so we could not monitor interactions. He had food and water in the corral. Shepherds were told to keep some sheep near the pups during the day.

I (Date: 8/01/2012; Age: 11 weeks; Weight: 13.9kg) –Buta's enclosure was in the corral opposite Nord's. There was only one lamb. Buta was monitored after Nord. He completely ignored the lamb and tried to play with the observer. When the observer chased him away he went to Nord's enclosure, running around it and searching for the entrance. He seemed to be active. Once, he found the exit and left the corral. He was smelling the ground and running in zigzags. After that he was returned to the corral by the observer but he tried to escape again. He stopped only when shouted at. Then he went to his enclosure and lay near it.

II (Date: 22/01/2012; Age: 13 weeks; Weight: 18.8 kg) —For this visit Buta's enclosure was inside the barn near the pups. We took him and some lambs into another part of the barn. The lambs remained still for the entire time. It seemed Buta wanted to spend energy and he was running around, provoking the lambs and the observer to play. First time he smelled lambs. Sometimes he tried to leave and go to the other pup he was prevented to do so by the observer. The shepherd reported that the pup was kept in his enclosure all day; this may explain his energetic behaviour. The lambs were not afraid of him but when he tried to play with them, they turned round, showing him their backs.

III (Date: 4/02/2012; Age: 14 weeks; Weight: Not scaled) –We took Buta in the corral with a small group of lame sheep. From the beginning he started to walk around slowly. First he smelled everything

then went to the sheep and smelled them. One of them licked Buta's ears. Buta occasionally stopped and raised ears and then continued moving. After 10 minutes he went to the sheep and lay near them. Soon one of the sheep went to him and smelled his nose. Buta raised his leg and touched the sheep's ear. At the end of the session we were approached by the shepherd and Buta got up and went to meet him.



IV (Date: 12/02/2012; Age: 16 weeks; Weight: 21.3 kg) –Buta was monitored in the barn's western part with more space. When he saw lambs he approached them and began smelling and licking them. The lambs' ears were bloody (see same day report for Nord) but Buta didn't lick them. Once one lamb tried to play, Buta lay down and showed his stomach. When the lamb withdrew he got up immediately

and started to play with it. Once he barked, stopped and listened to something. Once he tried to go to Nord's enclosure but was stopped by the observer. He stayed there for a while looking at Nord. Then shepherd passed them and Buta followed him.

V (Date: 7/03/2012; Age: 19 weeks; Weight: Not scaled) – This monitoring was conducted on the pasture. Sheep was separated in several flocks and they were grazing in different areas. We found the

flock accompanied by Buta and started monitoring. The flock was moving slowly and sometimes stopped to rest. Buta was following them behind. Sometimes he went inside the flock, sometimes he walked next to them. When the flock stopped, he also stopped

Beso said that Buta spend a lot of time with sheep. 'Buta follow the flock better than my other, adult LGDs' – He said. He seemed to be happy with the pup.

and found a place to sit or lie. He responded to strange noises by raising his ears and head. After ensuring that everything was fine, he lowered his head. During walking he smelled the ground. Beso (pup owner) reported that if pups were together with the flock, they play with each other.

Pup's health problems and body conditions

In the beginning of Buta's life in Vashlovani he had problems with Conjunctivitis and his eyes were very red. Despite this, he looked active and played and fed well. We asked the shepherd to call us if he got worse and, for the next visit, we took medicines which worked well; after two days of treatment, his eyes were fine.

In the middle of February, an adult LGD bit Buta on the cheek. We visited the farm to implement husbandry training when we saw Buta with a sore on his face. The vets (Zaza and Keti – GRDP intern) treated him, cleared the wound and gave recommendations to Beso about treatment for the next few days, until the wound would be cicatrized.

Summary

When looking through the monitoring results it seems that this pup's character differed between sessions. Sometimes he seemed more active than other times. During first session he absolutely ignored the only lamb in the corral but after that he seemed too active towards sheep and tried to provoke them to play. The pup seemed

to be bonded to sheep well. Final estimation from this time can be made from the last monitoring session which was conducted on pasture. Here the pup was following the flock well and it seemed to be attentive and trustworthy at least to sheep.

Pup name and chip number – Basara (268098100000011)

Sex - Male

Birth date - 09/11/2011

Farm - 74

Owner - Eko (Irakli Ichirauli)



Aptitude Testing

The testing was conducted outside in front of the house and on a flat area. During the test the pup felt fine but, as reported by the shepherd, he cries when he is alone (especially at night). Basara and Tuga were 2 week younger than other pups and they needed more time to adapt to their new environment.

Basara was tested at the age of 6 weeks and four days, three days earlier than recommended period (7-8 weeks). His scores were very different with the first part of testing scoring relatively lower than the 2nd. Mainly his scores were 1, which characterises him as;



Extremely dominant, showing a tendency to be aggressive and may be quick to bite. May be difficult to handle and require an experienced, competent trainer.

He got only one high score, in the stability test where he absolutely ignored the umbrella.

Basara's energy level was medium. He found the exit quickly and went out immediately.

Table 3. Basara's points from aptitude testing

Test	Score
Part I – General Aptitude	
1. Social attraction	1
2. Following	1
3. Restraint dominance	1
4. Social dominance	2
5. Elevation dominance	3
Part II -Obedience Aptitude	
1. Retrieving	4
2. Touch sensitivity	1
3. Sound sensitivity	4

4. Chase instinct (sight sensitivity)	2
5. Stability	6
Part III – Energy Level	Medium
Part IV – Problem Solving	Finds exit, goes through immediately

I (Date: 8/01/2012; Age: 8 weeks; Weight: 8.3 kg) – This monitoring session was conducted outside and near the farmhouse. At the time of our visit the pup's enclosures were inside the corral but a small group of sheep were grazing about 50 meters from them. We let Basara out and took him to the test area near the house. At the beginning of the session he was running around, smelling the ground,

approaching sheep and going away. After 5 minutes the sheep moved to an area with more grass. Basara also started to follow them. Sometimes he was licking the sheep which did not seem to bother them. After that Basara left the flock and went in front of the house. He smelt the place where his food was normally given. Besides that, Basara's start

'Shall we change the pup names?' – Adam, brother of pup owner asked – 'name "Basara" better describes Tuga's character. In Georgian, "basara" means aggressive dog. And he thought that Tuga is more active and aggressive than Basara.

was fine but after 15 minutes he was wandering relatively farther from flock. Then he started to play with us and with the shepherd, his trainer, for that time.

II (Date: 23/01/2012; Age: 11 weeks; Weight: 12 kg) —It was snowy weather and the pups' enclosures had been moved into the barn. Eight sheep were with them. Basara and the sheep were taken out in front of the house. We placed them in the centre and moved away. At the start, the pup was more interested with the observer and after smelled him he went to the car and urinated on the tire. While he was preoccupied with the observer and the car, the sheep went to find grass. Basara didn't follow them, to be busy exploring his surroundings. After it was clear that he would not re-join the sheep, the observer moved to them and called the pup. He responded immediately, barked and ran to me. Then suddenly he noticed the sheep and started to greet them, smelling and licking their heads. One sheep also licked the pup. Then Basara started to provoke them to play but without success.

III (Date: 4/02/2012; Age: 12 weeks; Weight: 12.2 kg) —About 20 sheep and lambs were inside the barn with pups. The pup and flock were taken to the flat area in front of the house. From the beginning of the session he interacted a lot with the sheep, licking and smelling them and running/walking around the flock. The sheep did not seem to respond at all; their ears were down and were chewing. Suddenly, Basara bite one of the sheep on its leg; he almost seemed not to like being ignored. The sheep just raised its leg, not even moving away. When the shepherd passed through the session area, the pup followed him, getting through his feet. During the session he urinated, drank water, smelled the ground and raised ears on strange noises.

IV (Date: 12/02/2012; Age: 13 weeks; Weight: 16.2 kg) – At the moment of our visit Basara was outside the enclosure in front of the house with some sheep. Another pup was inside the barn but not in the enclosure; the door was open so the pups could meet each other (so we could say that they were

together). We tried to monitor them outside but they started to run away. Then we took them inside the barn. At first Basara was very active and playing. Sometimes he would try to go to the other pup. When he could not he started barking. After several failed attempts to join the other pup, he lay near the wall, put his head on his front feet and stayed that way until the monitoring session ended.

V (Date: 9/03/2012; Age: 17 weeks; Weight: Not scaled) –Two days before this session we tried to monitor him in the corral but it was impossible because the pups were searching for each other and trying to escape from the monitoring place. That day's session could not, then, be conducted. The next day we tried again. When we arrived at the farm the pups were together outside the barn. We took Basara and eight sheep inside the barn and started monitoring. It was too hard to keep him inside. He was trying to escape and to meet Tuga. He seemed to have something in his throat as he was coughing a lot and eating sheep droppings. We brought water and food and he drank and ate a lot. The sheep's approach didn't worry him but he didn't show any other interactions to the sheep, although he readily lay down with them.

Pup's health problems and body conditions

In the beginning of February, when another bags of food were delivered to the farms, Eko's pups were extremely thin. There got tall but their weight was almost same as previous visit, and they appeared in bad physical shape. The shepherds claimed that the food we had provided was finished about 5 days prior but the pups had been fed with the other dogs (mainly sheep 'after birth' and a combination of flour, bran and water). After one week from that visit the pups became big and beautiful. Of course proper food impact on them but for me and Zaza this difference was unexpected.



Summary

This farm seemed to keep to our guidelines more or less correctly. I can definitely say that the pups from these farms spent much more time with sheep than the others. Having said that, during the last monitoring session he didn't exhibit good LGD characteristics. During the first sessions he seemed to be bonded with the sheep, interacting often with them without seeming to bother the sheep. But, during latter sessions it became very difficult to monitor him and his interest towards sheep had decreased considerably.

Pup name and chip number – Tuga (268098100000027)

Sex - Male

Birth date – 07/11/2011

Farm - 74

Owner - Eko (Irakli Ichirauli)



Aptitude Testing

The testing was conducted outside, in front of the house and on the flat area. During testing pup felt fine but as shepherd said he cries when he is alone (especially at night). Tuga and Basara were 2 week younger than other pups and they needed more time for adapt to new environment.

Tuga was tested at the age of 7 weeks. Mainly his score was 1 which characterizes him as;

Extremely dominant, showing a tendency to be aggressive and may be quick to bite. May be difficult to handle, requiring an experienced, competent trainer.

But in Social dominance test he scored 6; he froze in place and tried to leave the tester. In the second part of the testing, Obedience Aptitude, his scores were higher. He appeared to be obedient to humans but at the same time, active and dominant to other circumstances.

During the test Tuga's energy level was high but his obedience can help trainers to raise him properly.

The pup found the exit quickly and went out immediately.

Table 4. Tuga's points from aptitude testing

Test	Score
Part I – General Aptitude	
1. Social attraction	1
2. Following	1
3. Restraint dominance	1
4. Social dominance	6
5. Elevation dominance	4
Part II -Obedience Aptitude	
1. Retrieving	4
2. Touch sensitivity	1
3. Sound sensitivity	4
4. Chase instinct (sight sensitivity)	2

5. Stability	3
Part III – Energy Level	High
Part IV – Problem Solving	Finds exit, goes through immediately

I (Date: 8/01/2012; Age: 9 weeks; Weight: 8 kg) –Tuga's enclosure was in the corral but the sheep were not there. Monitoring was done in front of the house. From the beginning, Tuga was very active, running away and patrolling the territory. Prior to the session he had been kept in the enclosure and so

now he seemed keen to investigate his surrounding. He didn't pay significant attention to the sheep but, a couple of times when he approached them, they didn't move away. During the session he drank water with the sheep, tried to play with the shepherd and reacted to strange noises by raising the ears.

'Tuga is more active than Basara' - Eko said - 'They cry when they're alone but as soon as flock returns from pasture the pups get quiet, it seems they like to be surrounded by sheep. Once we took him to pasture near the farm; Tuga followed the sheep well but then got tired and we brought back at farm'

II (Date: 23/01/2012; Age: 11 weeks; Weight: 12.2 kg) —The weather was snowy and the pups' enclosures were inside the barn. There were some sheep at the farm. We took them and the pup to the centre of a flat area and started monitoring. Tuga was very active, playing and following everybody who passed through. He also tried to provoke the sheep to play. Once he scared the sheep when he put his leg on a sheep's shoulder. The sheep withdrew and stopped around one meter from the pup once he stopped chasing them. Twice he stopped and barked. Then listen to something and continued his previous activities.

III (Date: 4/02/2012; Age: 13 weeks; Weight: 12.9 kg) –The weather was snowy and the pups were

inside the barn in their enclosures. There were also a small group of sheep and lambs. We brought them out in front of the house. He was very active running and playing in the snow. He often got through our feet. He showed also some obnoxious behaviour towards the sheep: biting their ears, pulling wool or tails, play chasing etc. Sometimes he licked their muzzle or wool. On pups neutral behaviour sheep were also neutral. One sheep smelled the pup's genitals. Sometimes Tuga barked and he reacted to strange noises by raising his head and ears.



Between other activities he was smelling soil checking for different smells.

IV (Date: 12/02/2012; Age: 14 weeks; Weight: 16.9 kg) —At the moment of our visit the pup was inside the barn. He was not in the enclosure so the two pups could easily be together. The pup was monitored inside the barn and, from the start he was trying to escape, wondering around and searching for a hole. The sheep were standing in the middle of the barn. They were not active but when the pup

passed close, one smelled him. Tuga didn't pay attention to them. Only once he smelled one of the sheep; then he smelled the observer. The last 5 minutes was spent with him lying near the barn wall.

V (Date: 9/03/2012; Age: 17 weeks; Weight: Not scaled) – At first we visited the farm two days before this training session. For that moment pups were together and they didn't like being separated for monitoring. Tuga was trying to escape and play with Basara. After that we visited to the farm again and the pups were together again. We took him inside the barn with 8 sheep; at first he tried to escape but then he lay down and slept. He remained like this for most of the monitoring time. We tried to bring one sheep closer but he got up and went towards the door to lie down again. At one point, he suddenly got up, approached the sheep and smelled them in order under their tales; one of the sheep tried to avoid his approach.

Pup's health problems and body conditions

See Basara's profile

Summary

From the beginning of Tuga's life in Vashlovani, he seemed to be the most active amongst all six pups. He was also the one who barked at me when I went to Bombora to take the pups to the farms. Besides that, sometimes he was chasing the sheep or biting them, trying to provoke them to play. His approaches did not seem to scare the sheep and they seemed to trust him. However, it seemed that during the latter period the pups spent more time together and their behaviour changed with the last two sessions being difficult to keep them away from each other. When we did manage to separate them, they would seem to 'talk' to each other, trying to meet. After training we took Tuga on the pasture to try to make a trial session of the 'LGD focal sampling'. Zaza and I walked next to the flock and monitored the pup's behaviour. During about 2 hours the pup was close to sheep, often moving in and out of the flock, resting with them and interacting with them (but not very often).

Pup name and chip number – Babilina (268098100000598)

Sex – female

Birth date – 23/10/2011

Farm - 64

Owner – Zura Tilidze



Aptitude Testing

Testing was conducted outside in the corral next to the corral where the pups' enclosures were located.

Babilina was tested at the age of 9 weeks, a week later than the recommended period for aptitude testing (7-8 weeks). Mainly her scores were 1, which characterizes her as;

Extremely dominant, showing a tendency to be aggressive and may be quick to bite. May be difficult to handle, requiring an experienced, competent trainer. Among all the pups Babilina had the lowest scores, although she got a high score (6) for the stability test (ignores umbrella, shows no curiosity).

Babilina showed high energy level and found exit from barrier soon and left it immediately.

Table 5. Babilina's points from aptitude testing

Test	Score
Part I – General Aptitude	
1. Social attraction	1
2. Following	1
3. Restraint dominance	1
4. Social dominance	1
5. Elevation dominance	3
Part II -Obedience Aptitude	
1. Retrieving	4
2. Touch sensitivity	1
3. Sound sensitivity	2
4. Chase instinct (sight sensitivity)	1
5. Stability	6
Part III – Energy Level	High
Part IV – Problem Solving	Finds exit, goes through immediately

I (Date: 24/01/2012; Age: 13 weeks; Weight: 16.4 kg) —At the moment of our visit at the farm the pups were together near the house and only one sheep was with them; Barby was taken to the barn and Babilina was left near the house with sheep. The area was not closed but they didn't go far. The sheep were sick and staying at one place and the pup was wondering near us, sometimes lying and scratching when she got up. Then she moved onto a pile of sheep droppings, lay on top and slept.

II (Date: 5/02/2012; Age: 15 weeks; Weight: 19 kg) - There were 2 sheep and 3 lambs at the farm. They were chased into the flat area near the house. At this time there were few interactions between the animals. They were resting together and once the pup lay on her back, showing her stomach. Once she approached the observer and then went to the top of a small hill; her favourite place from all dogs from this farm.



III (Date: 14/02/2012; Age: 16 weeks; Weight: 20.3 kg) –The pups were together and a flock of about 50 sheep were grazing approximately 50 meters from the farm. We took Babilina and some sheep inside the barn for monitoring. At the beginning the pup was exploring the area, walking around and smelling sheep's wool in different parts. After 10 minutes she started searching for exit. After some failed attempts she started to cry and call the other pup.

IV (Date: 8/03/2012; Age: 19 weeks: Weight: Not scaled) —For this visit it was too difficult to monitor pups. They were trying to escape from corral and play with each other. We kept them for 6 minutes in the corral. All this time she spent in searching for hole. Then she jumped over the fence.

Tornike, shepherd who looked after the pups, said that Babilina more likes to be with sheep than Barby. Although when we tried to take them on pasture, they ignored the sheep and started to play. Another shepherd said that they are too young to follow sheep.

Pup's health problems and body conditions

In the beginning of January Zura's pups had a problem with their legs. As reported by the shepherds, they had tried to jump out of their enclosures and had damaged their legs. He also said that every time they returned them to the cages, the pups start to jump out. This fact was reported only from Zura's farm. The reasons could be the size of pups - Barby and Babilina were the only females and they were bigger than the others. Another reason could be that the shepherds didn't take them out for exercise for a while and pups had to spend energy. But when asked, the shepherds said that they train pups every day. To solve this problem we allowed them to keep the pups in the barn or corral but ensure that they won't be able to meet each other and sheep/lambs will be with them.

Summary

It seems that Babilina was not raised well by the owner. The shepherds were not following our instructions and in some cases absolutely ignoring them. The pup's character for this visit was

corresponding to it. After our attempt to make monitoring we took her onto the pasture with a larger flock. The pup absolutely ignored the sheep and only seemed interested in playing with the other pup. When they were playing the flock went too far but the pups were still playing.

Pup name and chip number – Barby (268098100000819)

Sex - Female

Birth date - 19/10/2011

Farm - 64

Owner – Zura Tilidze



Aptitude Testing

Aptitude testing was conducted outside in the corral next to the corral where the pups' enclosures were located.

Barby was tested at the age of 9 weeks. A week later then recommended period for aptitude testing (7-8 weeks). Mainly her scores were 1 which characterizes her as:



Extremely dominant, showing a tendency to be aggressive and may be quick to bite. May be difficult to handle, requiring an experienced, competent trainer.

She scored two 6s; in the sound sensitivity and stability tests, absolutely ignoring both stimuli.

Barby showed high energy level and quickly found the exit from barrier, made in the corner of corral and barn, leaving immediately.

Table 6. Barby's points from aptitude testing

Test	Score						
Part I – General Aptitude							
Social attraction	1						
2. Following	1						
3. Restraint dominance	1						
4. Social dominance	2						
5. Elevation dominance	3						
Part II -Obedience Aptitude							
1. Retrieving	2						
2. Touch sensitivity	1						
3. Sound sensitivity	6						
4. Chase instinct (sight sensitivity)	1						
5. Stability	6						
Part III – Energy Level	High						
Part IV – Problem Solving	Finds exit, goes through immediately						

I (Date: 24/01/2012; Age: 14 weeks; Weight: 17.7 kg) — At the moment of our visit at the farm Barby was playing with Babilina. We monitored Barby second. There was only one sheep at the farm. First I tried to monitor far from the house but she returned to her favourite place. We then placed them near the house. At this time, the pup stayed there. She was not very interested with the sheep and her ears were down when she passed it. The sheep was chewing and seldom looked at her as she wondered around, smelling the ground. Suddenly, some adult LGDs from a neighbouring farm started barking. Barby seemed afraid at first but then returned to her common activities. She was not interested in the observer even when he called her.

II (Date: 5/02/2012; Age: 15 weeks; Weight: 19.5 kg) -2 sheep and 3 lambs were at the farm and the pups were together. After Babilina's monitoring we kept her in the barn and brought Barby, with the sheep, near to the house. Barby was smelling the ground, resting, drinking water and feeding during the

session. Only once did she approach the sheep and they licked each other muzzle to muzzle. Once she pulled at the wool of the lamb very softly. She barked when the shepherd from a neighbouring farm approached the observer.

III (Date: 14/02/2012; Age: 17 weeks; Weight: 20.2 kg) —Pups were together and a flock of about 50 sheep were grazing near the farm. First we tried to monitor the pup outside, but she started to search for Babilina. Then we took her and some sheep inside the barn. She was not very interested in the sheep and merely laid down for the entire session. Occasionally, she would raise her head as if listening to something.

Fore, father of pup owner, said that when Tornike is herding the flock, the pups are always with sheep. It can be interpreted as 'pups are with Tornike not with sheep'. The pups seemed to be bonded to their trainer.

IV (Date: 8/03/2012; Age: 20 weeks; Weight: Not scaled) – We hardly managed to keep Barby inside the corral with sheep and she seemed to be actively avoiding them. After some minutes we carried her to the sheep but one of the ewes attacked her. Barby whined and ran away. After that she was

taken to the pasture for further observation. She started to play with Babilina, appearing to completely forget the flock. They continued playing even when the flock moved around 200 meters away.

Pup's health problems and body conditions

See Babilina's profile

Summary

As with her companion, Barby seems not to have received any proper socialisation. The shepherds were not following our instructions and in some cases absolutely ignored them. The pup's character for

this visit was corresponding to it. It was obvious that Barby was bonded to Babilina, the house and one of the shepherd but not at all to the sheep.

Problems concerning proper pup raising guidelines

One of the main problems we met was that shepherds didn't leave sheep with the pups, as was agreed initially. The reasons given for this were different in each case.

Beso. The plan had been to leave the pups with them until Beso arrived. As he said some his shepherds were at the farm as well and they would look after the pups. As we delivered the pups the shepherds present were told again that the pups should be with sheep at all times. However, upon the subsequent visit (for aptitude testing) there were no sheep at the farm and the shepherds said they can't leave sheep at farm without food. They talked like they heard it for the first time. I called Beso and described the situation, asking that he call the shepherds and demand they follow our guidelines. He promised to call but nothing had changed by the time of the next visit. After that Beso arrived at the farm with his sheep and the situation became better. From this time, a couple of new lambs had been born and concerns about leaving sheep at the farm were over.

Almost the same problem was found in N74 farm. They had some lame sheep which were grazing near farm but still far from the pups. Improving situation started with the start of lambing as then, shepherds had to keep lambs at farm.

Our contractor from farm 64 had to spend the whole winter season in Alvani. He increased the salary of one of his shepherds to motivate him to raise the pups well. However, this proved to be the worse farms as far as applying the prescribed socialisation methods. Pups from this farm spent very little time with sheep and we received worst LGDs from them.

Keeping pups far from each other was another big issue. In some cases pups were let out from enclosures simultaneously. Among Tushetian shepherds, the dominant thinking is that pups which are raised together will look after each other and will fight together against predators. After a couple of warnings, in farms N26 and N74, they did start to make more of an effort to keep the pup's seperate. But, with farm N64, the problems persisted. Every time they were warned, they separated them but each time we returned, the pups were together again. In the first two farms, when pups were not in enclosures, they were on the pasture with the flock but in farm 64 they were playing around the house waiting for their food, which sometimes included dead lamb.

The fact that our contractors were not fully participated in pup trainings made it hard to successfully communicate with them. In farm N26 our contractor Beso Gatsiridze arrived at farm later and after that left it often. On his absence there were different people looking after the pups. In farm N74 the situation was better because Adamo, the brother of our contractor, spent the whole winter at the farm and he was responsible for pup training.

Table7. Timeline of activities regarding LGD pups given to Tushetian sheep owners in VPA and in 2 km buffer zone*

Farm	Pup		D	ecem	ber, 2	011		January, 2012					February, 2012					March, 2012		
#		21	22	24	25	28	29	8	18	22	23	24	4	5	12	14	7	8	9	
26	Buta			1 st				2 nd		3 rd			4 th , Rabies		De-worm*	_				
	Nord								3 rd				4 th , Rabies		De-worm*					
74	Basara				1 st			2 nd			3 rd		4 th , Rabies		De-worm					
/4	Tuga				1 st			2 nd			3 rd		4 th , Rabies		De-worm					
64	Barby							*	3 rd			*		4 th , Rabies		De-worm*				
04	Babilina				1 st			* 2 nd				*3 rd		4 th , Rabies		De-worm*				

Additional information

Additional information														
Comments	Food	No sheep	No sheep	*No sheep				*Together	Food, Anti fleas	*Together	*Together			
				* Together										
Zaza's present	Yes	Yes	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes

Pup weights

	т ир межне																	
26	Buta		9.75		Х		13.9	х	18.8			Х		21.3		х		
20	Nord		8.55		Х		12.6	х	17.3			Х		20.2		х		
74	Basara			5.65		Х	8.3	Х		12		12.2		16.2				Х
/4	Tuga			Х		Х	8	Х		12.2		12.9		16.9				Х
6.1	Barby			Х		Х	12.6	Х			17.7		19.5		20.2		Х	
64	Babilina			Х		Х	10.35	Х			16.4		19		20.3		Х	

* Deliver pups
Aptitude testing
Weekly monitoring
Visit to farms



