YOU CAN LEAD A HORSE TO WATER,
BUT YOU CANNOT MAKE IT DRINK

*The Ecology and Social Context of the Reintroduction
of Semi-wild Horses in the Eastern Rhodopi Mountains:
An Exploratory Study*

APPENDIX

Student Thesis
Van Hall – Larenstein, the Netherlands

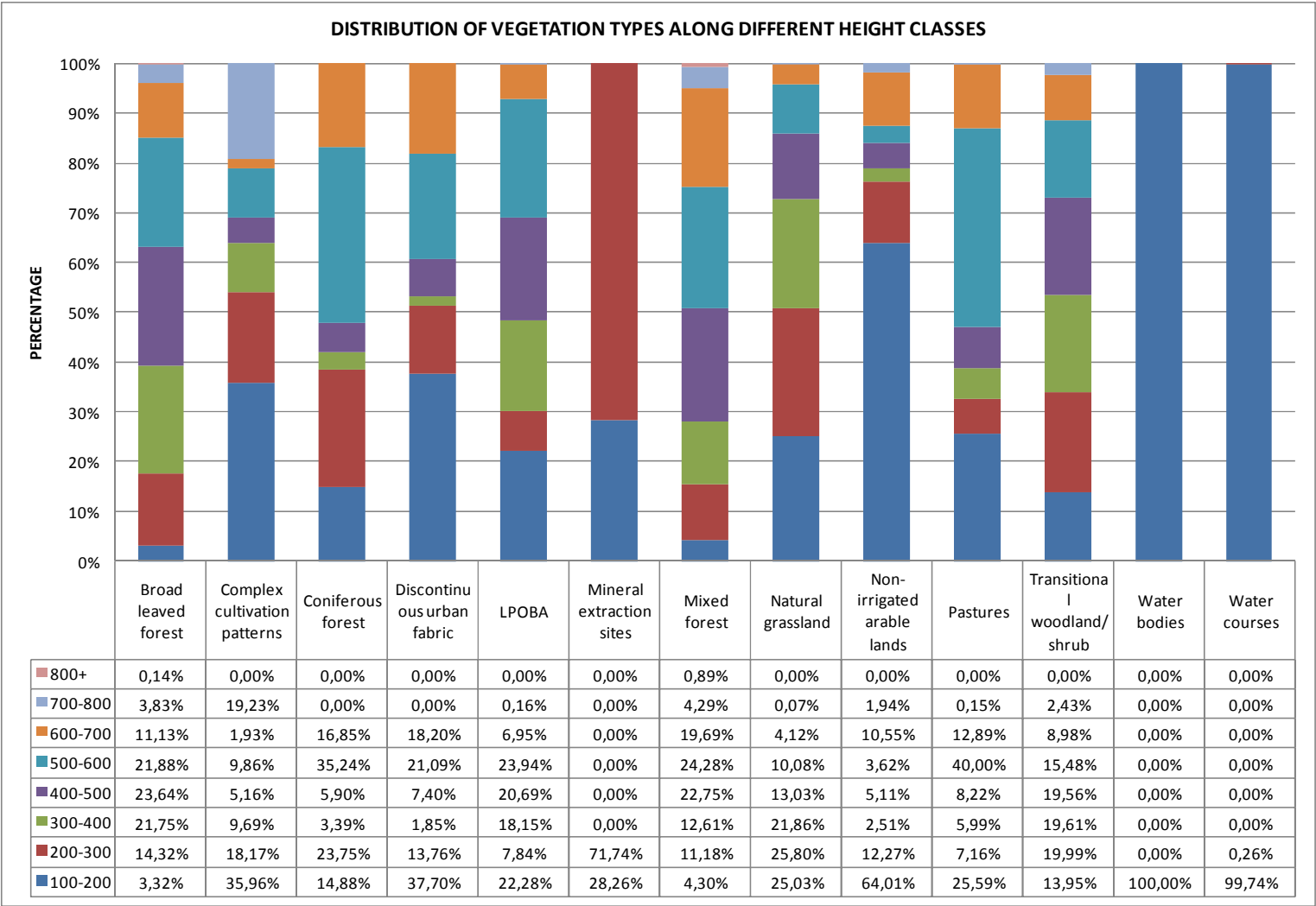Willem van Hoesel
Stefan van der Werff

Arnhem, June, 2011

APPENDIX I – Distribution of Land Use Types along Height Classes within 20 x 20 km Square

This graph/table shows the distribution of the different land use types along the height classes. This distribution takes into account our manually chosen area of 20 x 20 kilometres (in total approx. 400 km²). The height classes cover 100 meters each, starting at 100 meters above sea level. The percentage given is calculated with the total area of that land use type over the height classes. (Sum of column = 100%)

Broad leaved forest is divided almost evenly in every height class (about 10-20% per class), while the shares of mixed forest increases in the middle sections (between 400-700 meters, up to 20+ % per class). Land principally occupied by agriculture (in table as: LPOBA) has its biggest share (more than 90%) in the elevations of 600 meters and lower, the same accounts for natural grasslands. The biggest shares of non-irrigated arable lands are to be found in elevations between 100-200 meters (75+ %). For pastures this is either at elevations of 100-200, or 500-600 meters where the biggest share is found (40%). Transitional woodland is mostly distributed at heights between 100-500 meters (90% of the total).

DISTRIBUTION OF VEGETATION TYPES ALONG DIFFERENT HEIGHT CLASSES

PERCENTAGE

	Broad leaved forest	Complex cultivation patterns	Coniferous forest	Discontinuous urban fabric	LPOBA	Mineral extraction sites	Mixed forest	Natural grassland	Non-irrigated arable lands	Pastures	Transitional woodland/ shrub	Water bodies	Water courses
800+	0,14%	0,00%	0,00%	0,00%	0,00%	0,00%	0,89%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
700-800	3,83%	19,23%	0,00%	0,00%	0,16%	0,00%	4,29%	0,07%	1,94%	0,15%	2,43%	0,00%	0,00%
600-700	11,13%	1,93%	16,85%	18,20%	6,95%	0,00%	19,69%	4,12%	10,55%	12,89%	8,98%	0,00%	0,00%
500-600	21,88%	9,86%	35,24%	21,09%	23,94%	0,00%	24,28%	10,08%	3,62%	40,00%	15,48%	0,00%	0,00%
400-500	23,64%	5,16%	5,90%	7,40%	20,69%	0,00%	22,75%	13,03%	5,11%	8,22%	19,56%	0,00%	0,00%
300-400	21,75%	9,69%	3,39%	1,85%	18,15%	0,00%	12,61%	21,86%	2,51%	5,99%	19,61%	0,00%	0,00%
200-300	14,32%	18,17%	23,75%	13,76%	7,84%	71,74%	11,18%	25,80%	12,27%	7,16%	19,99%	0,00%	0,26%
100-200	3,32%	35,96%	14,88%	37,70%	22,28%	28,26%	4,30%	25,03%	64,01%	25,59%	13,95%	100,00%	99,74%

APPENDIX II – Classification of Height Classes According to Land Use Types within 20 x 20 km Square

This graph/table shows the composition, or classification of the height classes according to the land use types found within the class. The height classes cover 100 meters, starting at 100 meters above sea level. With this table one can clearly see where the height class consists of regarding to vegetation (percentage). The percentage given is calculated with the total area of that height class over the vegetation types. (Sum of column = 100%) (This classification takes into account our manually chosen area of 20 x 20 kilometres.) (Sum of column = 100%)

The area cover by broad leaved forests clearly increases when height increases (more than 50% in each height class), as is the same with mixed forests but still a lower percentage (about 10). The more diverse height classes (i.e. the presence of the different land use types) can be found on the lower elevations. Transitional woodland takes an even share in almost every class, of about 15% (except for 800 meters and up). The area covered by pastures is fairly low in every height class (less than 1%). From 300 meters and up, the height classes consist mostly of broad leaved and mixed forest, land principally occupied by agriculture and transitional woodland or shrubs. Grazing areas such as natural grasslands and pastures cover only a small part in each height class. The height class of 800+ meters consists only by either broadleaved or mixed forest –although the total area is not large.

CLASSIFICATION OF HEIGHT CLASSES ACCORDING TO VEGETATION TYPES

	100-200m	200-300m	300-400m	400-500m	500-600m	600-700m	700-800	800+
Water courses	2,90%	0,01%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Water bodies	9,55%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Transitional woodland/ shrub	12,20%	17,30%	13,42%	11,93%	9,51%	10,16%	9,71%	0,00%
Pastures	2,53%	0,70%	0,46%	0,57%	2,79%	1,65%	0,07%	0,00%
Non-irrigated arable lands	28,02%	5,32%	0,86%	1,56%	1,11%	5,98%	3,88%	0,00%
Natural grassland	5,26%	5,37%	3,60%	1,91%	1,49%	1,12%	0,06%	0,00%
Mixed forest	2,94%	7,57%	6,75%	10,86%	11,68%	17,43%	13,44%	53,26%
Mineral extraction sites	0,38%	0,95%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Land principally occupied by agriculture, with significant areas of natural vegetation	16,87%	5,87%	10,75%	10,93%	12,74%	6,81%	0,56%	0,00%
Discontinuous urban fabric	1,95%	0,70%	0,07%	0,27%	0,77%	1,22%	0,00%	0,00%
Coniferous forest	1,33%	2,10%	0,24%	0,37%	2,21%	1,95%	0,00%	0,00%
Complex cultivation patterns	2,95%	1,47%	0,62%	0,29%	0,57%	0,20%	7,21%	0,00%
Broad leaved forest	12,32%	52,64%	63,22%	61,30%	57,13%	53,48%	65,06%	46,74%
Beaches, dunes, sands	0,79%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%

Area of Height Classes within 20x20 km Square

Height	Area km²
100-200	58,0
200-300	58,6
300-400	74,1
400-500	83,1
500-600	82,5
600-700	44,8
700-800	12,7
800-900	0,7
Total	414,3

Area of Land Use Types within 20x20 km Square

Land use type	Area km²
Beaches, dunes, sands	0,5
Broad leaved forest	215,3
Complex cultivation patterns	4,7
Coniferous forest	5,2
Discontinuous urban fabric	3,0
LPOBA	43,9
Mineral extraction sites	0,8
Mixed forest	39,7
Natural grassland	12,2
Non-irrigated arable lands	25,4
Pastures	5,7
Transitional woodland/ shrub	50,7
Water bodies	5,5
Water courses	1,7
Total	414,3

APPENDIX III – Overview Herd (Pers. comm. Tim Jenkins, April, 2011)

♀

	AGE (years)	MOTHER	FATHER
Penelope	8	Unknown	Unknown
Milka	9	Unknown	Unknown
Zorka	4	Milka	Gurun
Pet	4	Unknown	Unknown
Rosa	4	Svesda (removed)	Unknown
Whitefoot	3	Milka	Unknown
Londa	2	Penelope	Gurun
Zara	1	Rosa	Gurun
† Gabi	5	Unknown	Unknown

†: died on April, 28th, 2011

♂

	AGE	MOTHER	FATHER
Yanko	5	Unknown	Unknown
Sheboy	2	Pet	Gurun
Karaka	2	Milka	Gurun
Garry	1	Gabi	Gurun
Petter	1	Pet	Gurun
Prince	1	Svesda (removed)	Gurun
Gurka	1	Milka	Gurun
Rossi	3 months	Rosa	Gurun
† Gurun	11	Unknown	Unknown

†: died in December, 2010 (father of all horses under 3 years of age)

Appendix IV – Map Land Use Types within 20 x 20 km Square (Upper red area is Madzharovo, lower is Chernichino)

Legend:

- GPS Location
- Minimun Convex Polygon-95%
- Kernel-95%

Land Use Type

- Discontinuous urban fabric
- Mineral extraction sites
- Vineyards
- Non-irrigated arable lands
- Complex cultivation patterns
- Pastures
- Land principally occupied by agriculture
- Natural grassland
- Transitional woodland/ shrub
- Mixed forest
- Broad leaved forest
- Coniferous forest
- Sparsely vegetated areas
- Beaches, dunes, sands
- Inland marshes
- Water bodies
- Water courses
- Bare rock

0   6.000
Meters

APPENDIX V – Distance to Natural Watercourses

Distance to natural watercourses   **(P.I. is used from Kernel95%)**

Land use type   Distance from stream with Strahler value (expressed in amount of fixes):

Strahler 1	P.I.	0-99	100-199	200-299	300-399	400-499	500-599	600-699	700-799	800-899	900-999	1000+
Natural grassland	10,82			1		11	6	8	86	146	**187**	155
Pastures	8,90	5	106	**170**	48					8	1	
Non-irrigated arable lands	6,71	8	48	**165**	92	73	31	3				
Land principally occupied by agriculture	2,03	26	**199**	27	18		8	5				
Average amount of fixes in veg.type PI>1		13,00	117,7	90,8	52,7	42,0	15,0	5,3	47,0	73,5	187,0	155,0

Strahler 2	P.I.	0-99	100-199	200-299	300-399	400-499	500-599	600-699	700-799	800-899	900-999	1000+
Natural grassland	10,82										1	**599**
Pastures	8,90			1	8	5	68	**140**	93	17	6	
Non-irrigated arable lands	6,71	2	2	34	109	**210**	36	21	6	2		
Land principally occupied by agriculture	2,03	6	6	3	7	5	**191**	14	6	5	6	40
Average amount of fixes in veg.type PI>1		8,0	8,0	38,0	124,0	220,0	295,0	175,0	105,0	24,0	13,0	639,0

Strahler 3	P.I.	0-99	100-199	200-299	300-399	400-499	500-599	600-699	700-799	800-899	900-999	1000+
Natural grassland	10,82							27	133	**295**	120	25
Pastures	8,90								4	1	25	**308**
Non-irrigated arable lands	6,71											**420**
Land principally occupied by agriculture	2,03											**283**
Average amount of fixes in veg.type PI>1								27	68,5	148	72,5	259

Strahler 4	P.I.	0-99	100-199	200-299	300-399	400-499	500-599	600-699	700-799	800-899	900-999	1000+
Natural grassland	10,82											**600**
Pastures	8,90											**338**
Non-irrigated arable lands	6,71											**420**
Land principally occupied by agriculture	2,03											**283**
Average amount of fixes in veg.type PI>1												**410,3**

APPENDIX VI – Vegetation Transects

Including:

The land use type where the vegetation transect was recorded

The distance to the nearest border, i.e. an area with another land uses type (in meters). The different land use type is between parenthesizes)

Horizontal structure (with the abbreviation for the species centred, see table below) – view from above

Vertical structure – side view (no distinction is made in the relative position of each measured plant/tree)

Visual obstruction from both left (+) and right site (-) of the transect line
Whereas 0 is no obstruction and 15 (maximum) is total visual obstruction (see **METHODS**)

Count: the amount of plants/trees recorded

Average height (±standard deviation, stdev)

GPS location (UTM)

Used abbreviations for the species:

Overview distinguished species in transects

Abbreviation	Species	Scientific name
Cr	Christ's thorn	*Paliurus spina-christi*
Cs	Common broom	*Cytisus scoparius*
Dc	Deciduous (tree)	-
Di	Thistle species	-
Gr	Grasses	-
He	Herb	-
Ju	Juniper species	*Juniperus spp.*
Pi	Pinus species	*Pinus spp.*
Qu	Oak species	*Quercus spp.*
Rf	Bramble	*Rubus fruticosus*
Ro	Rose species	*Rosa spp.*
Sh	Shrub	-

Overview observations

Land use type	Transect nr.	Random / Used	Thistle species	Christ's thorn	Common broom	Deciduous (tree)	Herb	Juniper species	Pinus species	Oak species	Bramble	Rose species	Shrub	Total	Average height of measured plants per land use type	Standard deviation of height
Transitional woodland shrub	1	R	8		3		12	3						26	0,60	0,62
Transitional woodland shrub	4	R		14		27		4		4				49	1,84	0,91
Forest	2	R				1			7	9				17	8,69	7,04
Forest	3	R			20	15	2	13		41				91	0,96	1,10
LPOBA	5	R	6			10	15	7		4	6	2		50	0,95	0,96
LPOBA	8	R	4	11	4	4	23	4		8				58	0,64	0,63
Natural grassland	6	R				10	45	4				5		64	0,56	0,39
Natural grassland	9	R				11	42	16		2				71	0,65	0,46
Pasture	X1	U	1			1	7	2				5	5	21	1,06	0,76
Pasture	X2	U	1			8	25					6	1	41	0,77	0,68
Pasture	X3	U	2			17	7					6		32	1,19	0,72
Non-irrigated arable lands	X4	U												-	-	
Non-irrigated arable lands	X5	U	1				3					4		8	0,53	0,37
Non-irrigated arable lands	X6	U					16							16	0,49	0,23
	Total count:		23	25	27	104	197	53	7	68	6	28	6	544	1,12	
	Average height per species:		0,46	1,76	0,27	1,29	0,44	1,45	16	1,34	0,46	1,55	0,46	1,12		

TRANSECT 1 – TRANSITIONAL WOODLAND / SHRUB   DIST. TO BORDER: 50 METER (FOREST)

Horizontal structure:
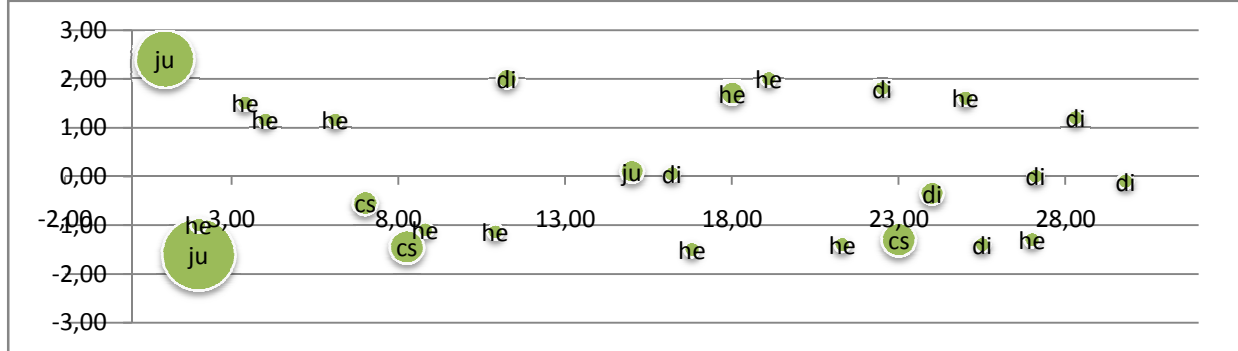
Count: 26
Average height (±stdev): 0,60 ± 0,62 m

Visual obstruction (left & right):
(0=no obstruction, 15=total obstruction)
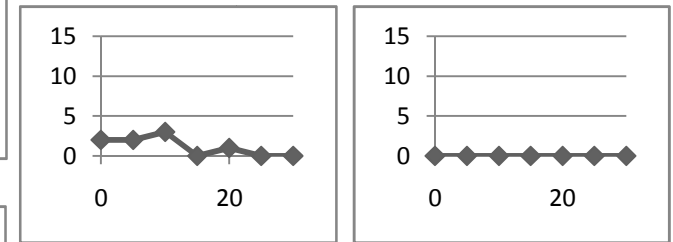
Vertical structure:
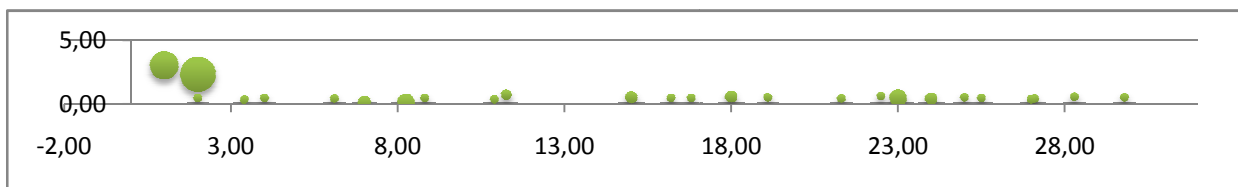
TRANSECT 2 – FOREST   DIST. TO BORDER: 300 METER (LPOBA)
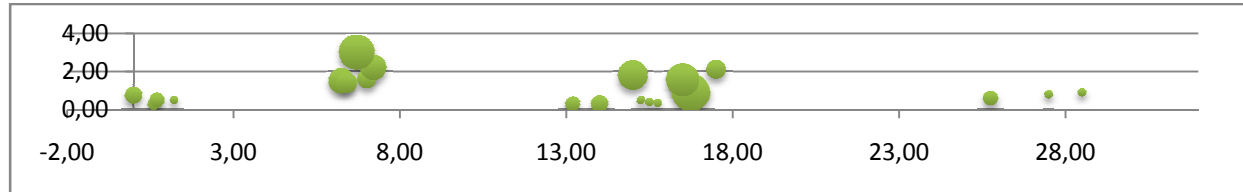
Horizontal structure:
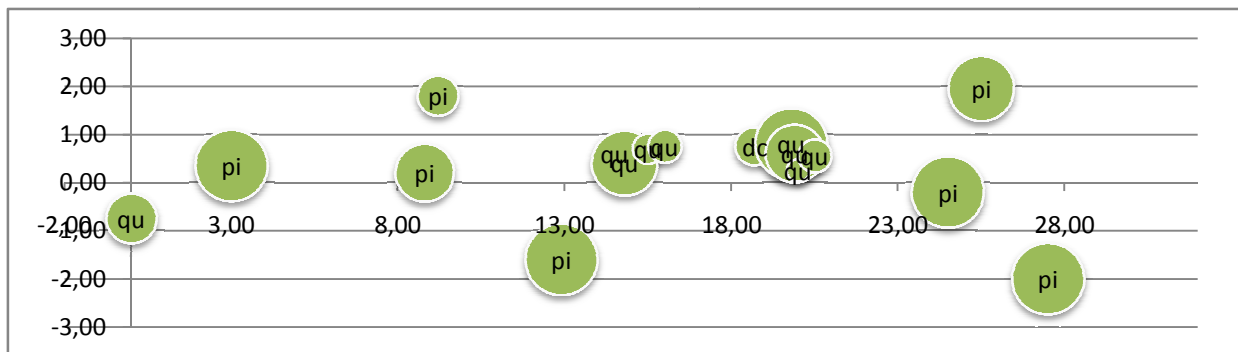
Count: 17
Average height (±stdev): 8,69 ± 7,04 m
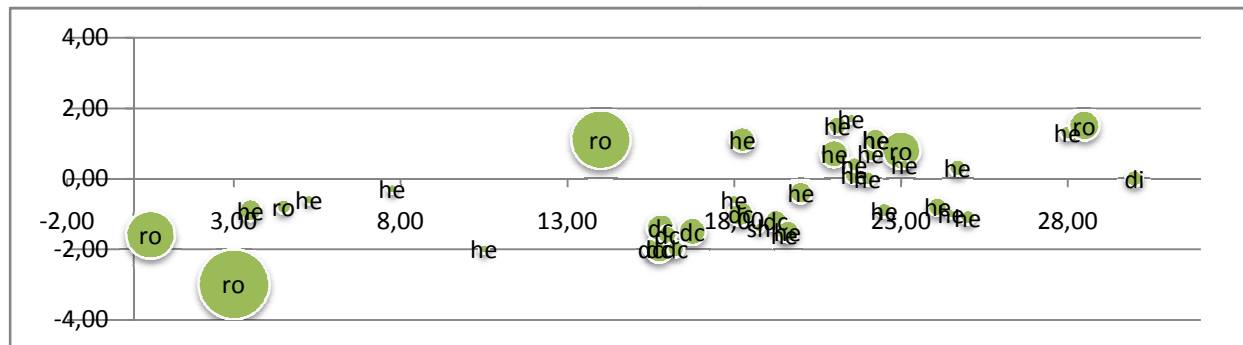
Visual obstruction (left+right):
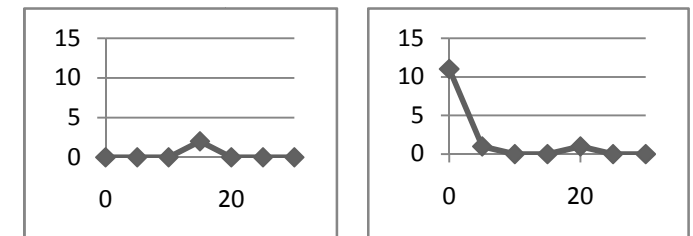
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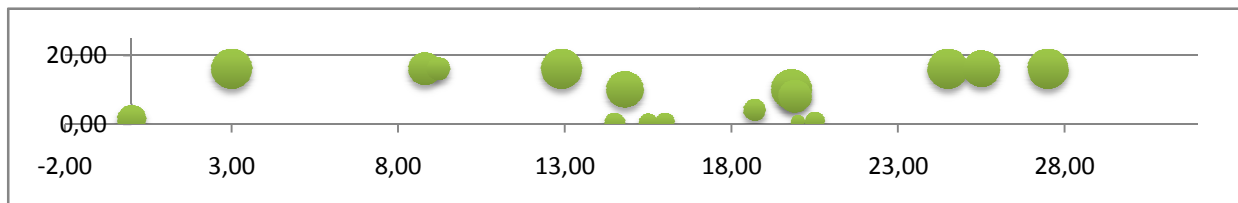
## TRANSECT 3 – FOREST   DIST. TO BORDER: 55 METER (TRANSITIONAL WOODLAND)   GPS: 35T 404708 4607902

Horizontal structure:
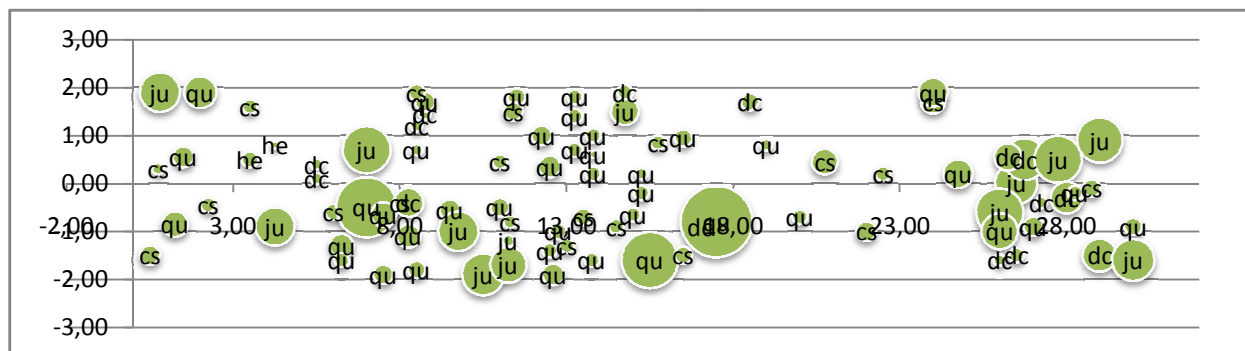
Count: 91
Average height (±stdev): 0,96 ± 1,10 m

Visual obstruction (left+right):
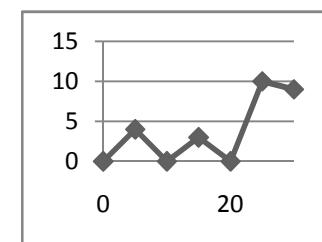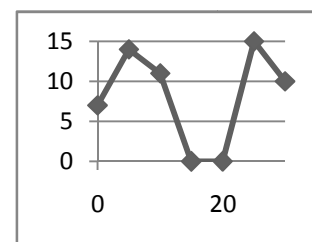
Vertical structure:
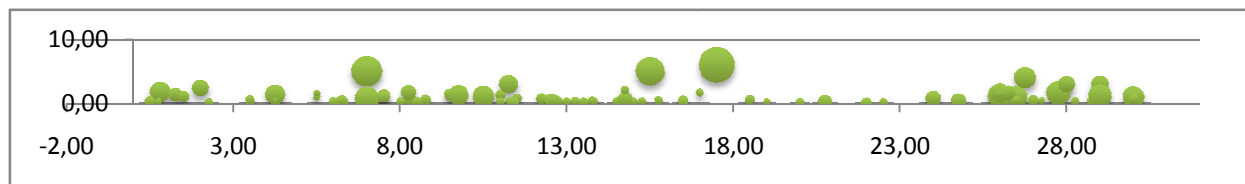
TRANSECT 4 – TRANSITIONAL WOODLAND / SHRUBS   DIST. TO BORDER: 60 METER (FOREST)   GPS: 35T 404954 4607057

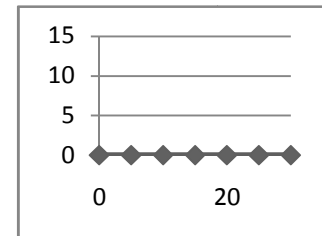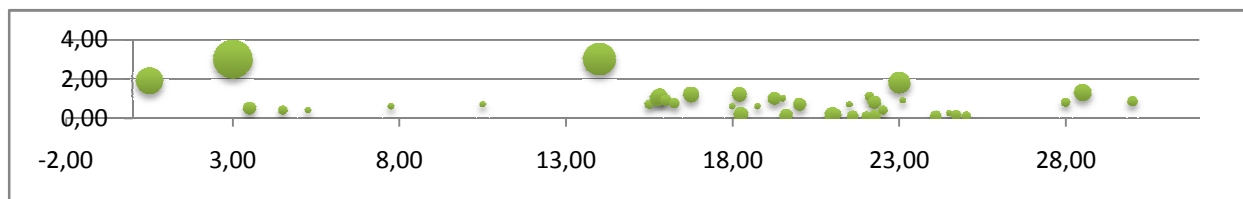Horizontal structure:
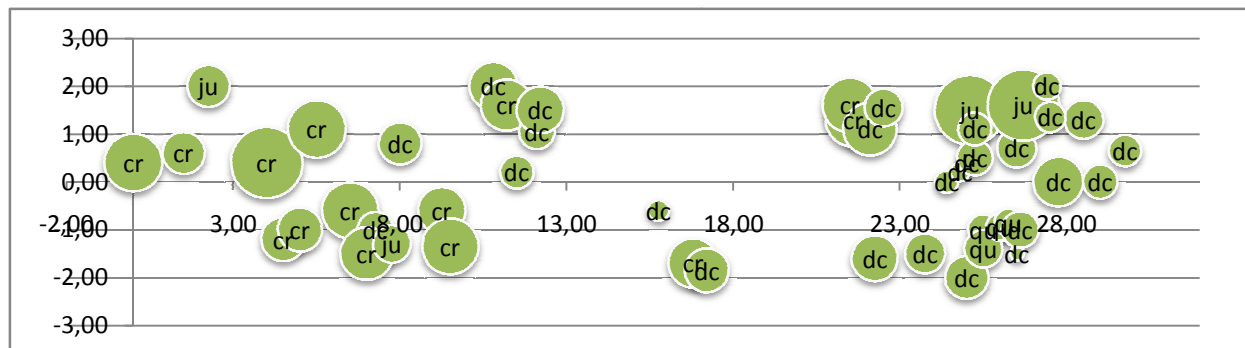
Count: 49
Average height (±stdev): 1,84 ± 0,91 m

Visual obstruction (left+right):

Vertical structure:

TRANSECT 5 – LPOBA   DIST. TO BORDER: 40 METER (FOREST)   GPS: 35T 405027 4603631
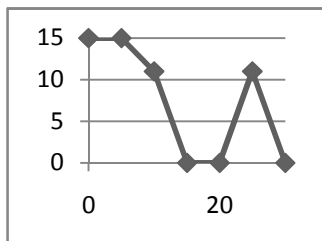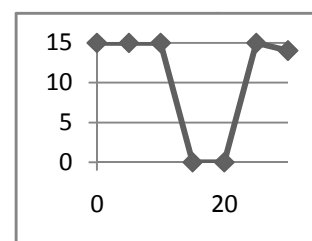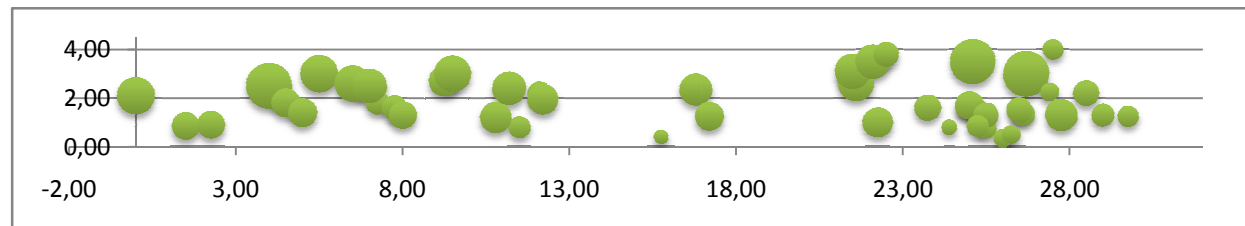
Horizontal structure:
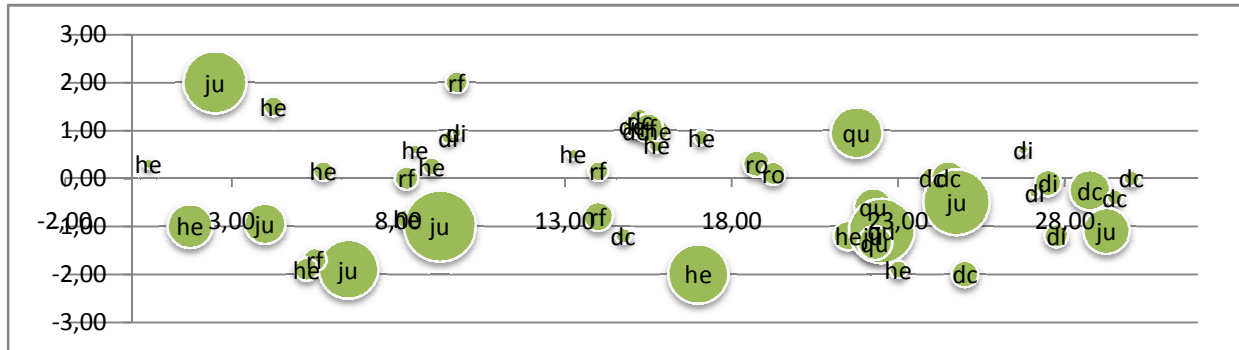
Count: 50
Average height (±stdev): 0,95 ± 0,96 m

Visual obstruction (left+right):
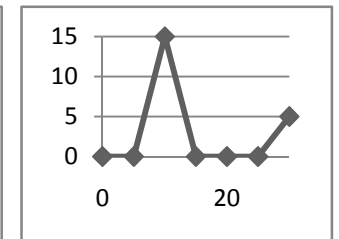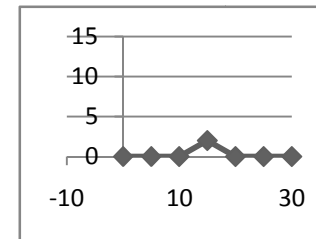
Vertical structure:

TRANSECT 6 – NATURAL GRASSLAND   DIST. TO BORDER: 130 METER (FOREST)   GPS: 35T 403810 4604790
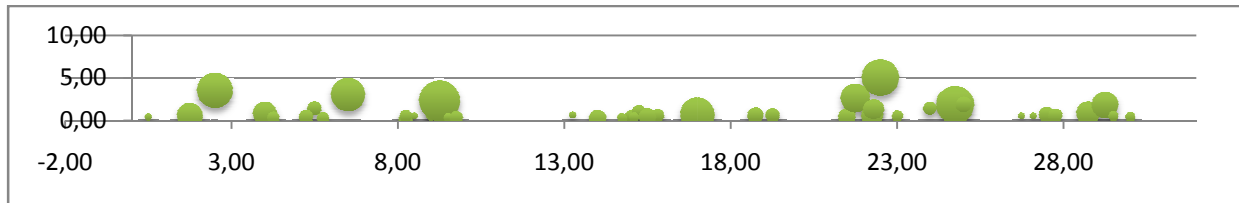
Horizontal structure:
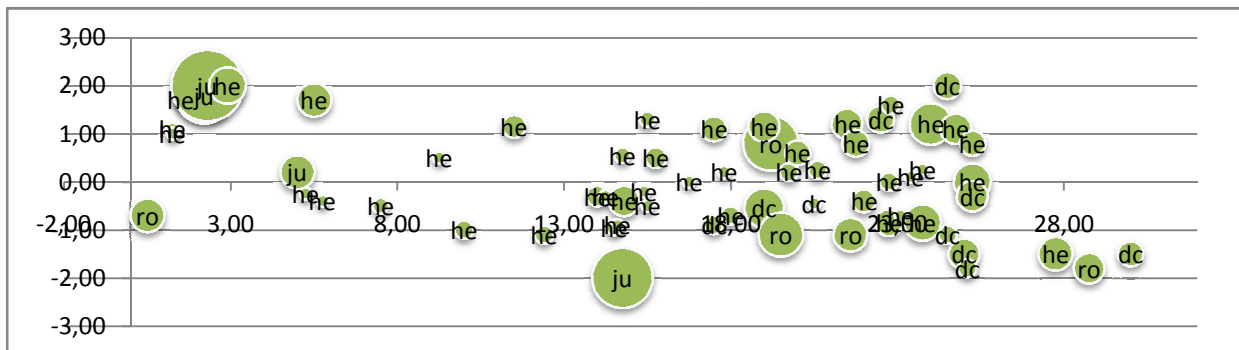
Count: 64
Average height (±stdev): 0,65 ± 0,39 m

Visual obstruction (left+right):
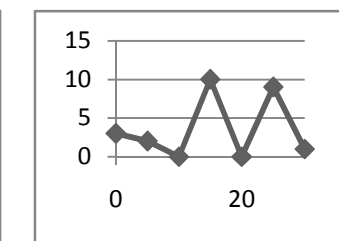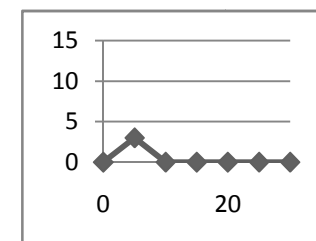
Vertical structure:
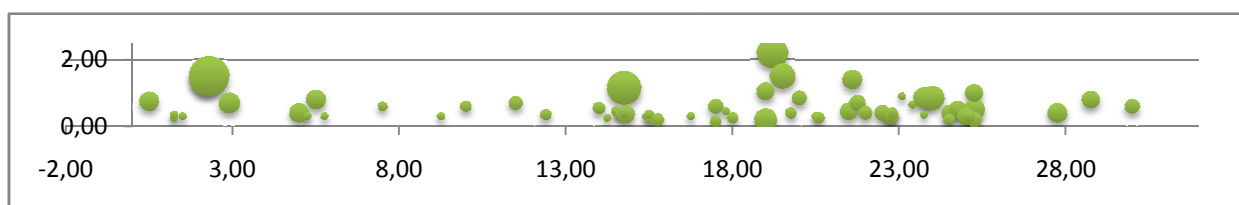
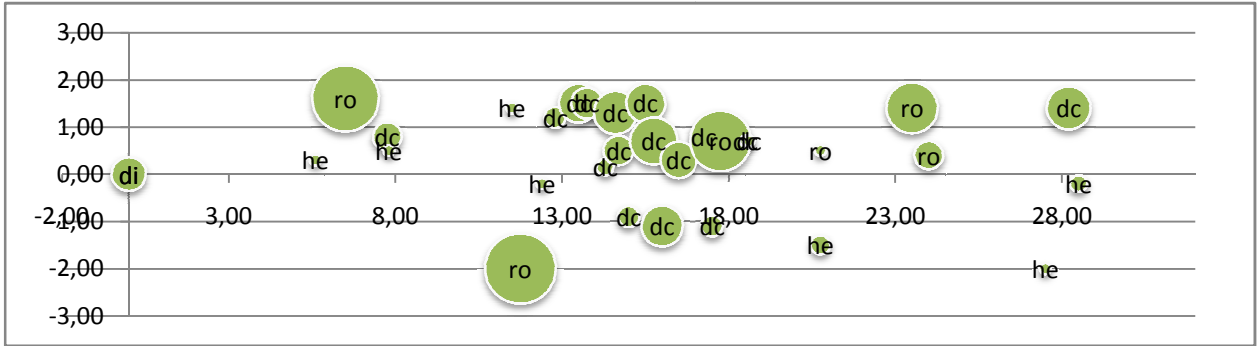## TRANSECT 8 – LPOBA   DIST. TO BORDER: 100 METER (FOREST)   GPS: 35T 403211 4607580
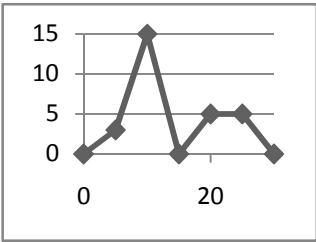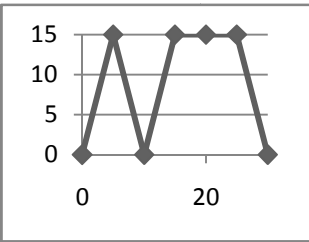
Horizontal structure:
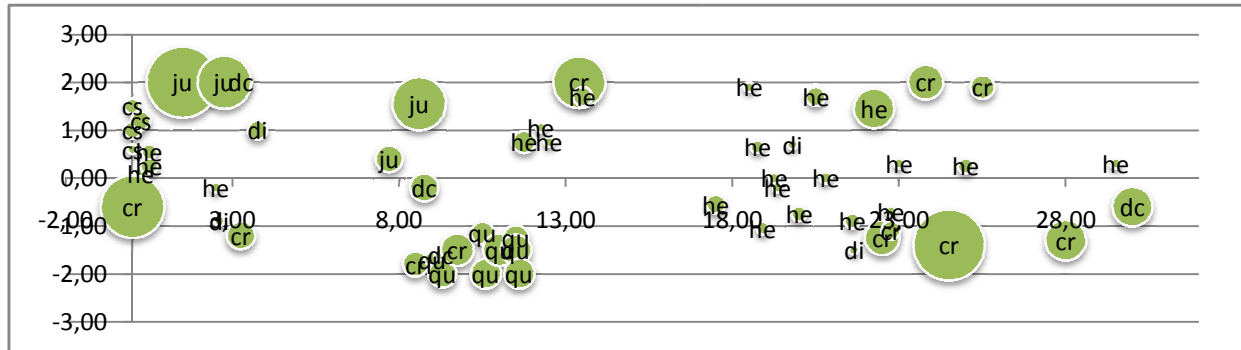
Count: 58
Average height (±stdev): 0,64 ± 0,63 m

Visual obstruction (left+right):
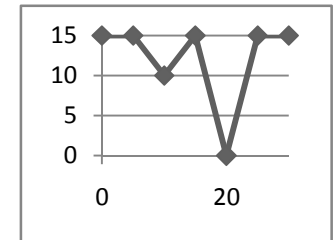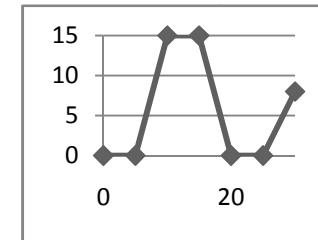
Vertical structure:
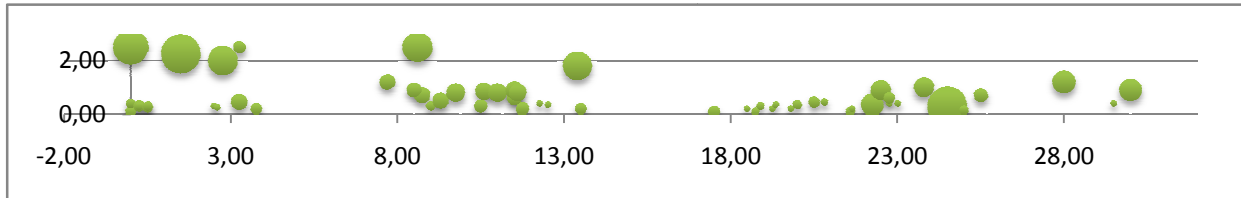
TRANSECT 9 – NATURAL GRASSLAND   DIST. TO BORDER: 80 METER (FOREST)   GPS: 35T 404244 4605602

Horizontal structure:
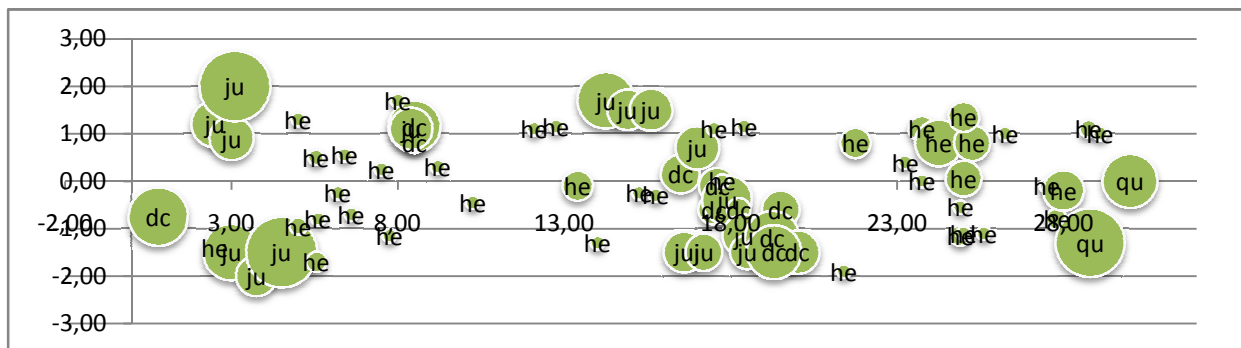
Count: 71
Average height (±stdev): 0,65 ± 0,46 m

Visual obstruction:
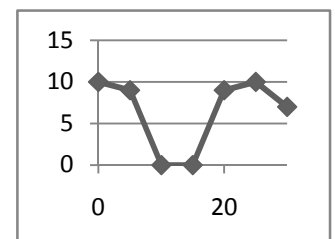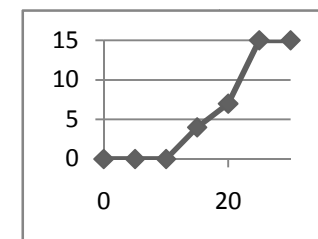
Vertical structure:
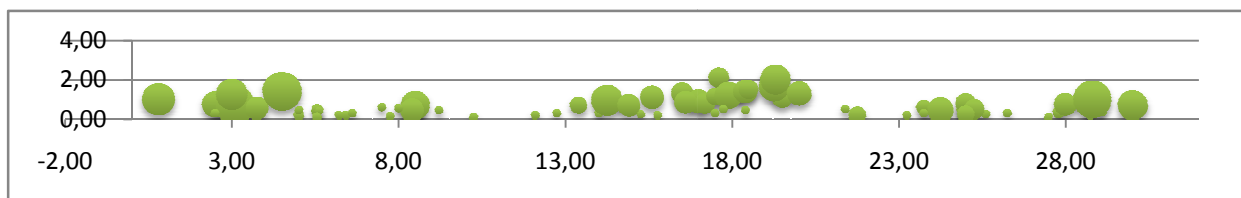
TRANSECT X1 – PASTURE

DIST. TO BORDER: 80 METER (FOREST)

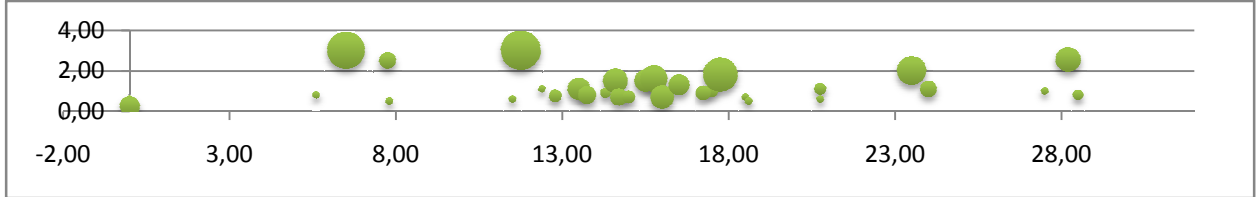**GPS: 35T 407411 4601502**

Horizontal structure:
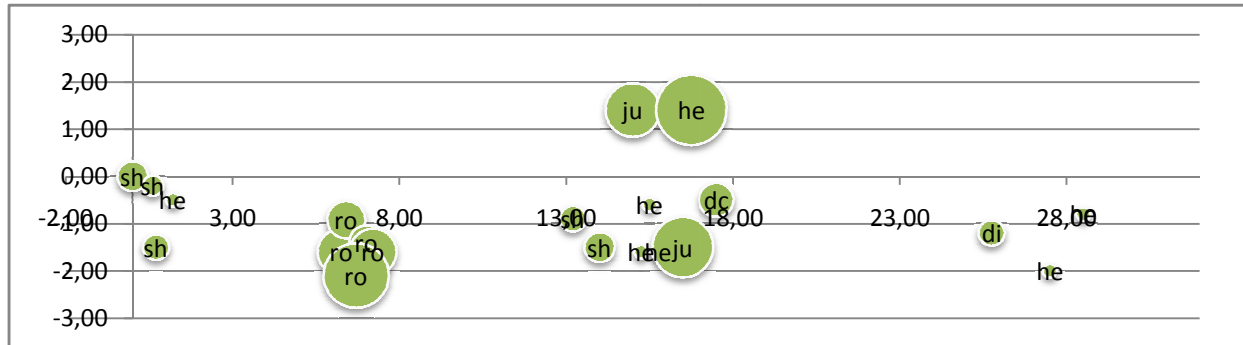
Count: 21
Average height (±stdev): 1,06 ± 0,76 m

Visual obstruction (left+right):
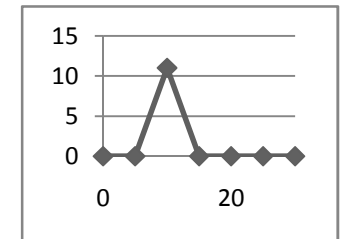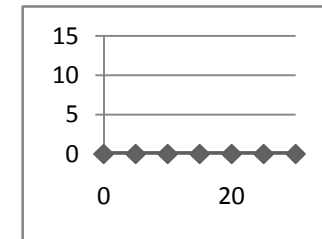
Vertical structure:

TRANSECT X2 – PASTURE

DIST. TO BORDER: 170 METER (FOREST)

GPS: 35T 407575 4601622

Horizontal structure:

Count: 41
Average height (±stdev): 0,77 ± 0,68 m

Visual obstruction (left+right):
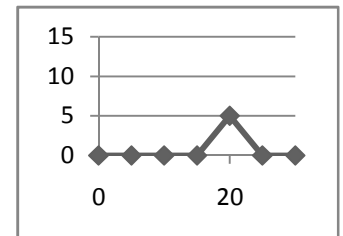
Vertical structure:

TRANSECT X3 – PASTURE   **DIST. TO BORDER: 40 METER (FOREST)**   **GPS: 35T 407672 4601715**

Horizontal structure:

Count: 32
Average height (±stdev): 1,19 ± 0,72 m

Visual obstruction (left+right):
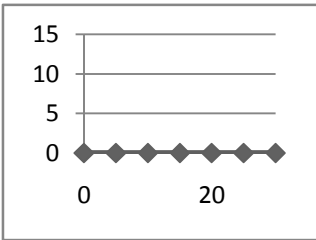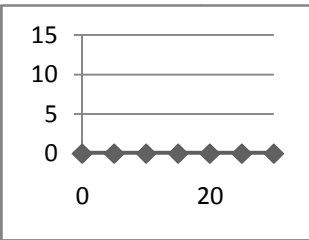

Vertical structure:

TRANSECT X4 – NON-IRRIGATED ARABLE LAND   **DIST. TO BORDER: 85 METER (FOREST)**   **GPS: 35T 406506 4600914**
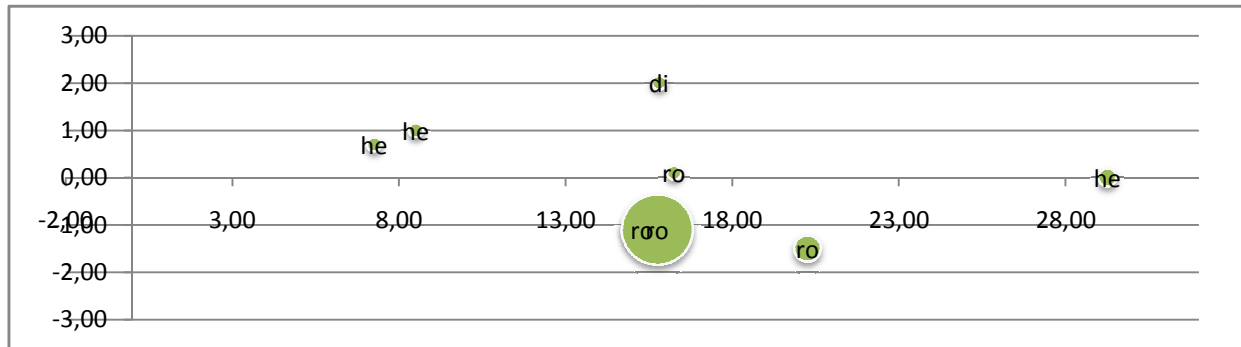
NO PLANTS OTHER THAN GRASS (AVERAGE HEIGHT: 3-4 CM)

Visual obstruction (left+right):

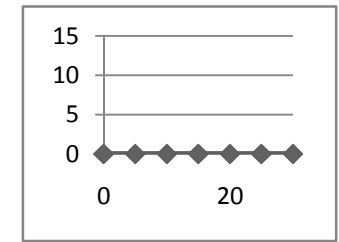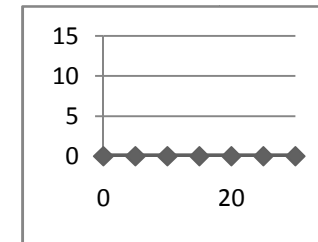## TRANSECT X5 – NON-IRRIGATED ARABLE LAND   DIST. TO BORDER: 90 METER (FOREST)   GPS: 35T 406956 4600590
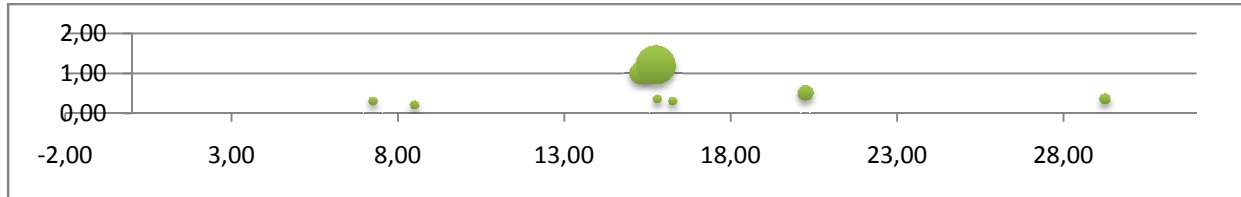
Horizontal structure:

Count: 8
Average height (±stdev): 0,53 ± 0,37 m

Visual obstruction (left+right):

Vertical structure:

TRANSECT X6 – NON-IRRIGATED ARABLE LAND   DIST. TO BORDER: 20 METER (FOREST)   GPS: 35T 407212 4600297

Horizontal structure:
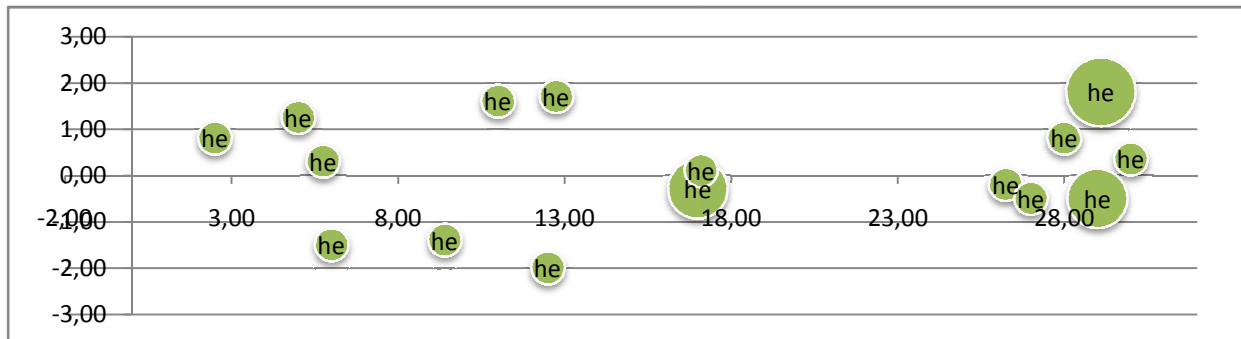
Count: 16
Average height (±stdev): 0,49 ± 0,23 m

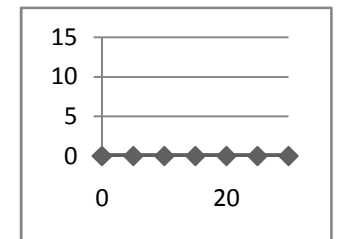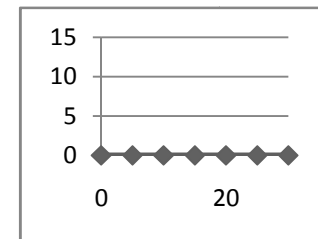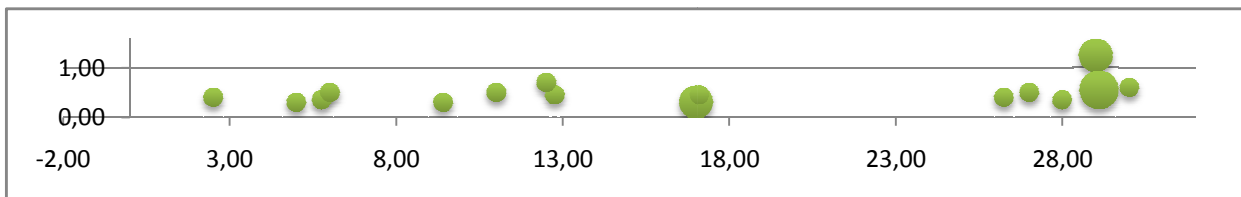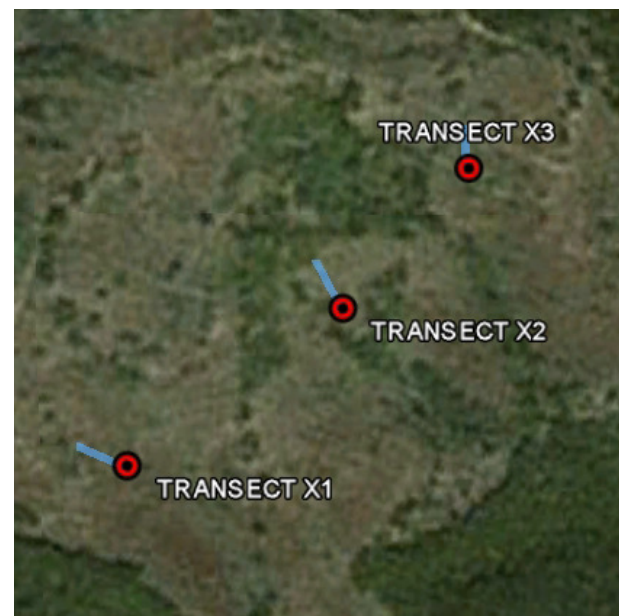Visual obstruction (left+right):

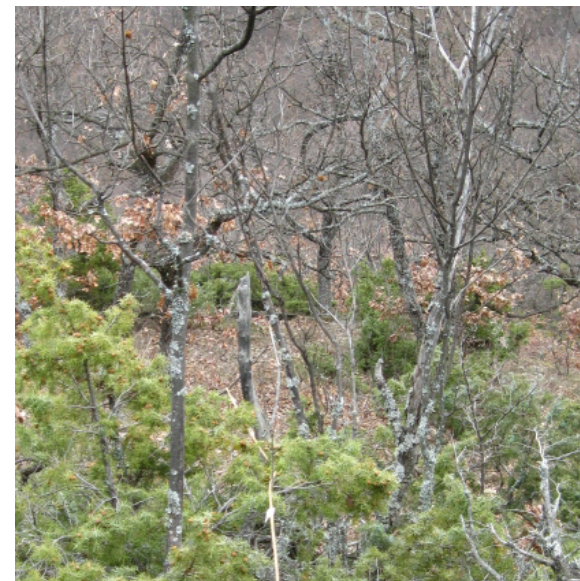Vertical structure:

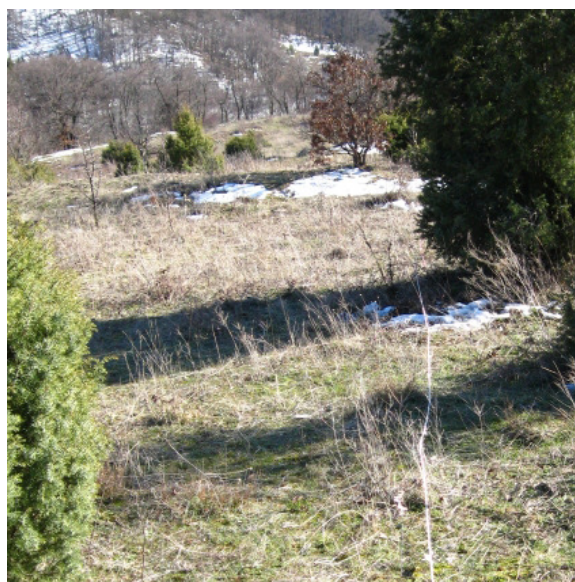OVERVIEW TRANSECTS 1 – 2 – 3 – 4 – 5 – 6 – 8 – 9 & X1 – X2 – X3 – X4 – X5 – X6

PHOTOGRAPHS OF TRANSECTS
1 − 2 − 3

4 − 5 − 6

8 – 9 – X1

X2 – X3 – X4

X5 – X6

APPENDIX VII – Questionnaire

Questionnaire Bachelor Thesis
Education Forest and Nature Conservation, the Netherlands

Hello, we are two 'Forest and Nature Conservation' graduate students from the Netherlands. Currently, we are involved in studying the horses in the area of Madzharovo. Our study would not be complete without knowing what local people think of nature in their surroundings. With this questionnaire we hope we will get a better image of how you (local people) think about nature, animals and ecotourism. We sincerely hope you take some time to think about your answers, and keep in mind that there is no right answer - every answer will be appreciated and we will be grateful for your cooperation! (This questionnaire will be anonymous.)

Thanks in advance!   *Stefan van der Werff & Willem van Hoesel*

�☙ WHO ARE YOU?

Man/woman	Age	Profession	Place of residence	Hobbies

ᚃ KNOWLEDGE OF NATURE

► *What is 'nature' according to you?* (You can choose more than one.)

A place:

O a. with flowers and trees
O b. for animals such as horses and cows (farm animals)
O c. for animals such as deer and wild boar
O d. for animals such as wild cats and wolves
O e. for people to live in (building houses)
O f. for people to work in (herding sheep, keeping cattle)
O g. for people to recreate in (for holidays etc.)

O h. for people to use (natural resources: timber, rocks, metals)
O i. for hunters to go into
O j. which is beautiful (aesthetics)
O k. which is ugly (aesthetics)
O l. which is a nuisance / an obstruction
O m. which is lifeless

► *What is 'wilderness' according to you?* (You can choose more than one.)

O a. Where no human being goes
O b. Where no human being is able to go
O c. Something like a jungle
O d. A dangerous place

O e. It does not exist here, only somewhere else
O f. It is right here, in Bulgaria!
O g. Where the wild things are
O h. Where people only go to hunt
O i. Nature and wilderness is the same

► *What is the role of humans in nature/wilderness?* (Choose only one.)

O a. Hunter (to take animals from nature)
O b. Manager (to control natural processes, such as forest fires or growing animal populations)
O c. Owner (land owner, perhaps to use it for their cattle, to build houses or take natural resources such as timber)
O d. No role (to leave it alone)
O e. Creator (there is no nature / wilderness without people)

ℭ THE IMPORTANCE OF NATURE

► *What is the main importance of nature?* (You can divide 12 points to indicate the importance.)

a. Economy (timber, hunting rights, recreation)   .....
b. Ecology (only for nature, for the animals to live in)   .....
c. Recreation (during holidays / free days)   .....
d. Hunting (meat)   .....
e. To provide fresh air (health)   .....

► *How do you experience the nature/environment of the East Rhodopi Mountains?* (Choose only one.)

O a. I really don't like it!
O b. Not my favourite (I do not get impressed)
O c. Neutral
O d. Good (I think it is nice)
O e. Very good! (It is beautiful and unique)

ℭ HISTORY OF LOCAL ANIMAL HUSBANDRY

► *What do you know about the history of local animal husbandry?*
....
....
....
....

► *How do you think the future of animal husbandry will look like in the East Rhodopi Mountains / Bulgaria?* (You can choose two at most.)

O a. It will disappear
O b. Nothing changes
O c. It will get bigger (more intensive farming, perhaps bio industry)
O d. We will use other species (productive species) to compete with other countries in the EU
O e. We will use the same species as we have now
O f. We will use rare breeds

Local livestock breeds have disappeared during communistic times in Bulgaria. Nowadays, more and more people get interested in using those local breeds.

► *What is the importance of bringing back these local species?* (Choose only one.)

O a. Saving local species from extinction
O b. Local species are better adapted to stay in nature on their own
O c. Local species will give better milk/meat
O d. It is nice to see those animals in the nature (aesthetic value)

O e. Just for fun
O f. Because keeping them gives subsidy to the owner
O g. No importance
O h. It is better not to use them

ᗉ WILD ANIMALS

► *What animal species used to live in the Rhodopi Mountains, but now have disappeared?* (You can choose more than one.)

O a. Wild cows
O b. Wild horses
O c. European bison
(Bison bonasus)
O d. Fallow deer

(Dama dama)
O e. Red deer
(Cervus Elaphus)
O f. Wild goats / mouflon (Ovis ammon)
O g. Ibex (Capra ibex)

O h. Chamois (Rupicapra rupicapra)
O i. Lynx (Lynx lynx)
O j. Bear (Ursus arctos)
O k. Nothing has disappeared

► *What is the reason for their disappearance?* (You can choose more than one.)

O a. Hunting by people
O b. Poaching by people (illegal hunting)
O c. Hunting by wolf / jackal
O d. Destruction of the places where they live
O e Moved away because they did not like it here (no human cause)

ᗉ PROJECT 'NEW THRACIAN GOLD'

► *Do you know about this project?*

O a. Yes   **O b.** No

► *If yes, what do you know about the project 'New Thracian Gold'?*
(You can choose more than one.)

O a. It is about agriculture / cattle keeping
O b. It is about nature
O c. It is a tourist agency

O d. It is an archaeological project
O e. It is about ecotourism
O f. I don't know

►**If yes**, *how did you get to know this project?* (Choose only one.)

O a. By internet
O b. By friends/colleague
O c. By folder / flyer
O d. By television

O e. On a fair (tourism)
O f. Trough a workshop / information gathering
O g. By visiting the area (for example, during holidays)

►*What do you think of this project?* (Choose only one.)

O a. I really don't like it   **O b.** Not my favourite   **O c.** Neutral   **O d.** Good   **O e.** Very good!

Please tell us why…
……
……
……

The project consists of three components, of which one is the 'wilderness' component. This component has its goals in reintroducing locally extinct (disappeared) animals like horses and deer species.

►*What do you think is the importance for nature of reintroducing species?* (Choose only one.)

O a. No importance, it will only cause more wolves and damages of browsing (on crops and trees)
O b. It is not good for the other animals
O c. It doesn't make a difference
O d. It is good to have more species, more is always better
O e. It will make the ecosystem complete

►*What do you think is the importance of reintroducing lost species for you?*

O a. It will bother me   **O b.** It is of no importance   **O c.** It is good for me

Because:
……
……

❧ WILDERNESS, ECO-TOURISM AND ECONOMICS

Ecotourism has its aim to have the lowest possible impact on the environment. Wilderness is proven to be very useful for ecotourism. When ecotourism develops, it might have a big influence on the local (economical) situation.

►*What do you think of ecotourism in the (East) Rhodopi Mountains?* (Choose only one.)

O a. I really don't like it   **O b.** Not my favourite   **O c.** Neutral   **O d.** Good   **O e.** Very good!

►*Do you think that the Rhodopi Mountains are ready for ecotourism? And, if not, what do you think should change/happen in order to be ready?*

O a. Yes!
O No, because: (You can choose more than one.)

O b. The area is not attractive
O c. No good accommodation
O d. No good food
O e. It is not clean
O f. There are a lot of dogs

O g. The people are not nice
O h. The local people do not want tourism
O i. The natural areas are not special
O j. There is nothing to see in general

❧ COMMENTS
……
……
……
……
……
❧ **Thank you very much for your time!**

APPENDIX VIII – Results Questionnaire (calculated % with a total of 43 local participants)

KNOWLEDGE OF NATURE

1. What is 'nature' according to you? (You can choose more than one.)	Number	Percentage
A) with flowers and trees	9	20.9%
B) for animals such as horses and cows (farm animals)	7	16.3%
C) for animals such as deer and wild boar	8	18.6%
D) for animals such as wild cats and wolves	6	14.0%
E) for people to live in (building houses)	5	11.6%
F) for people to work in	5	11.6%
G) for people to recreate in (for holidays etc.)	7	16.3%
H) for people to use (natural resources: timber, rocks, metals)	4	9.3%
I) for hunters to go into	3	7.0%
J) which is beautiful (aesthetics)	26	60.5%
K) which is ugly (aesthetics)	0	0.0%
L) which is a nuisance / an obstruction	0	0.0%
M) which is lifeless	0	0.0%
N) everything around us	14	32.6%

2. What is 'wilderness' according to you? (You can choose more than one.)	Number	Percentage
A) Where no human being goes	9	20.9%
B) Where no human being is able to go	9	20.9%
C) Something like a jungle	3	7.0%
D) A dangerous place	1	2.3%
E) It does not exist here, only somewhere else	4	9.3%
F) It is right here, in Bulgaria!	12	27.9%
G) Where the wild things are	11	25.6%
H) Where people only go to hunt	2	4.7%
I) Nature and wilderness is the same	8	18.6%

3. What is the role of humans in nature/wilderness? (Choose only one.)	Number	Percentage
A) Hunter (to take animals from nature)	4	9.3%
B) Manager (to control natural processes, such as forest fires or growing animal populations)	26	60.5%
C) Owner (land owner, perhaps to use it for their cattle, to build houses or take natural resources such as timber)	6	14.0%
D) No role (to leave it alone)	8	18.6%

E) Creator (there is no nature / wilderness without people)	4	9.3%

IMPORTANCE OF NATURE

4. What is the main importance of nature?	Number	Given value
A) Economy (timber, hunting rights, recreation)	23	88
B) Ecology (only for nature, for the animals to live in)	24	121
C) Recreation (during holidays / free days)	34	147
D) Hunting (meat)	13	60
E) To provide fresh air (health)	17	82

5. How do you experience the nature/environment of the East Rhodopi Mountains? (Choose only one.)	Number	Percentage
A) I really don't like it!	0	0.0%
B) Not my favourite (I do not get impressed)	0	0.0%
C) Neutral	1	2.3%
D) Good (I think it is nice)	12	27.9%
E) Very good! (It is beautiful and unique)	29	67.4%

HISTORY OF LOCAL HUSBANDRY

7. How do you think the future of animal husbandry will look like in the East Rhodopi Mountains / Bulgaria? (You can choose two at most.)	Number	Percentage
A) It will disappear	4	9.3%
B) Nothing changes	2	4.7%
C) It will get bigger (more intensive farming, perhaps bio industry)	15	34.9%
D) We will use other species (productive species) to compete with other countries in the EU	4	9.3%
E) We will use the same species as we have now	6	14.0%
F) We will use rare breeds	18	41.9%

8. What is the importance of bringing back these local species? (Choose only one.)	Number	Percentage
A) Saving local species from extinction	12	27.9%
B) Local species are better adapted to stay in nature on their own	21	48.8%
C) Local species will give better milk/meat	16	37.2%
D) It is nice to see those animals in the nature (aesthetic value)	1	2.3%
E) Just for fun	0	0.0%
F) Because keeping them gives subsidy to the owner	3	7.0%

G) No importance	1	2.3%
H) It is better not to use them	1	2.3%

WILD ANIMALS

9. What animal species used to live in the Rhodopi Mountains, but now have disappeared? (You can choose more than one.)	Number	Percentage
A) Wild cows	1	2.3%
B) Wild horses	3	7.0%
C) European bison (Bison bonasus)	2	4.7%
D) Fallow deer (Dama dama)	3	7.0%
E) Red deer (Cervus Elaphus)	4	9.3%
F) Wild goats / mouflon (Ovis F ammon)	4	9.3%
G) Ibex (Capra ibex)	2	4.7%
H) Chamois(Rupicupicapra)	3	7.0%
I) Lynx (Lynx lynx)	6	14.0%
J) Bear (Ursus arctos)	5	11.6%
K) Nothing has disappeared	10	23.3%
L) Camels	4	9.3%
No Idea	8	18.6%

10. What is the reason for their disappearance? (You can choose more than one.)	Number	Percentage
A) Hunting by people	2	4.7%
B) Poaching by people (illegal hunting)	13	30.2%
C) Hunting by wolf / jackal	0	0.0%
D) Destruction of the places where they live	16	37.2%
E) Moved away because they did not like it here (no human cause)	4	9.3%
F) People didn't need them anymore	3	7.0%
No Idea	7	16.3%

PROJECT 'NEW THRACIAN GOLD'

11. Do you know about this project?	Number	Percentage
A) Yes	24	55.8%
B) No	19	44.2%

12. If yes, what do you know about the project 'New Thracian Gold'? (You can choose more than one.)	Number	Percentage
A) It is about agriculture / cattle keeping	14	32.6%
B) It is about nature	14	32.6%
C) It is a tourist agency	2	4.7%
D) It is an archaeological project	1	2.3%
E) It is about ecotourism	7	16.3%
F) I don't know	1	2.3%

13. If yes, how did you get to know this project? (Choose only one.)	Number	Percentage
A) By internet	2	4.7%
B) By friends/colleague	8	18.6%
C) By folder / flyer	1	2.3%
D) By television	0	0.0%
E) On a fair (tourism)	10	23.3%
F) Trough a workshop / information gathering	6	14.0%
G) By visiting the area (for example, during holidays)	2	4.7%

14. What do you think of this project? (Choose only one.)	Number	Percentage
A) I really don't like it	0	0.0%
B) Not my favourite	2	4.7%
C) Neutral	5	11.6%
D) Good	14	32.6%
E) Very good!	7	16.3%

15. What do you think is the importance for nature of reintroducing species? (Choose only one.)	Number	Percentage
A) No importance, it will only cause more wolves and damages of browsing (on crops and trees)	0	0.0%
B) It is not good for the other animals	0	0.0%
C) It doesn't make a difference	3	7.0%
D) It is good to have more species, more is always better	22	51.2%
E) It will make the ecosystem complete	19	44.2%

16. What do you think is the importance of reintroducing lost species for you?	Number	Percentage
A) It will bother me	1	2.3%
B) It is of no importance	8	18.6%

C) It is good for me	32	74.4%

WILDERNESS, ECOTOURISM AND ECONOMICS

17. What do you think of ecotourism in the (East) Rhodopi Mountains? (Choose only one.)	Number	Percentage
A) I really don't like it	0	0.0%
B) It is bad	1	2.3%
C) Neutral	4	9.3%
D) It is good	29	67.4%
E) It is very good!	9	20.9%

18. Do you think that the Rhodopi Mountains are ready for ecotourism? And, if not, what do you think should change/happen in order to be ready?	Number	Percentage
A) Yes!	31	72.1%
No, because: (You can choose more than one.)	0	0.0%
B) The area is not attractive	5	11.6%
C) No good accommodation	1	2.3%
D) No good food	1	2.3%
E) It is not clean	1	2.3%
F) There are a lot of dogs	0	0.0%
G) The people are not nice	0	0.0%
H) The local people do not want tourism	0	0.0%
I) The natural areas are not special	0	0.0%
J) There is nothing to see in general	6	14.0%
K) Infrastructure	7	16.3%
L) Local people need more education	7	16.3%
M) Government needs to change or to help	6	14.0%