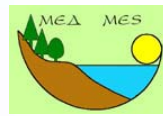







Conflicts between lynx, other large carnivores, and humans in Macedonia and Albania

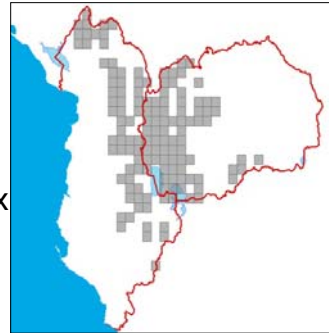
Erjola **Keçi**, Aleksandër **Trajçe**, Gjorge **Ivanov**, Aleksandar **Stojanov**, Dime **Melovski**, Olsi **Qazimi**, Ferdinand **Bego**, Gabriel **Schwaderer**, Annette **Spangenberg**, John **Linnell**, Urs **Breitenmoser** and Manuela **von Arx**



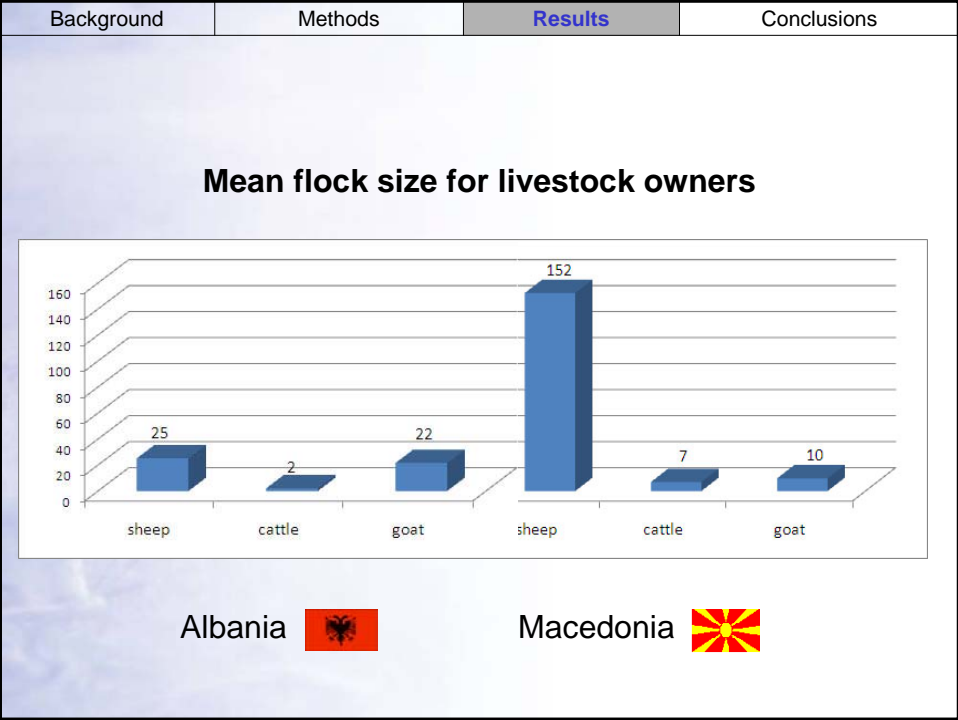
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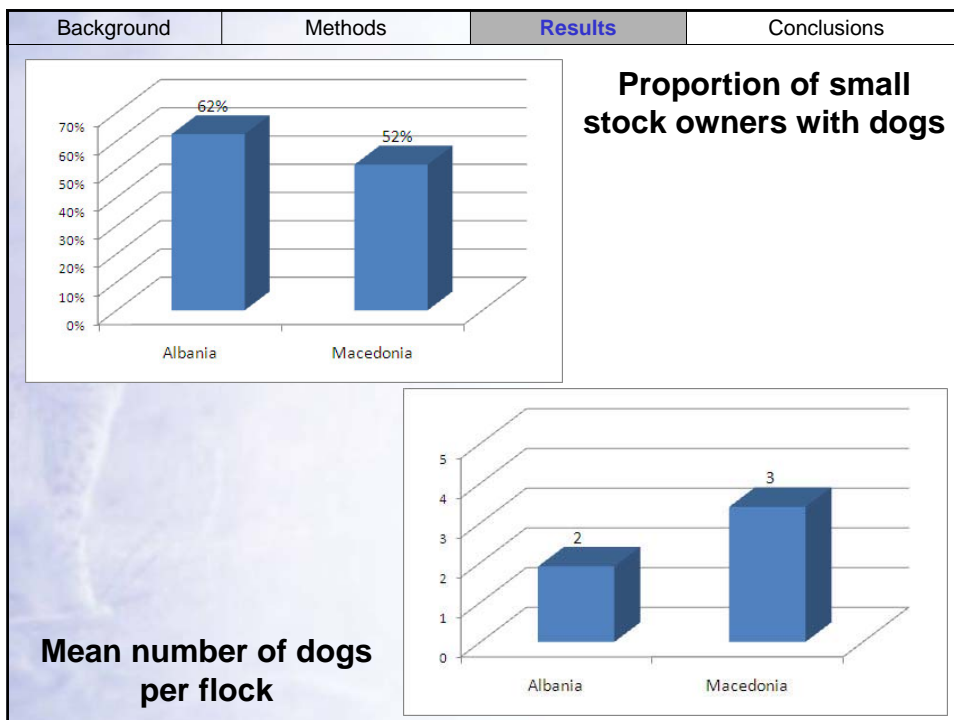
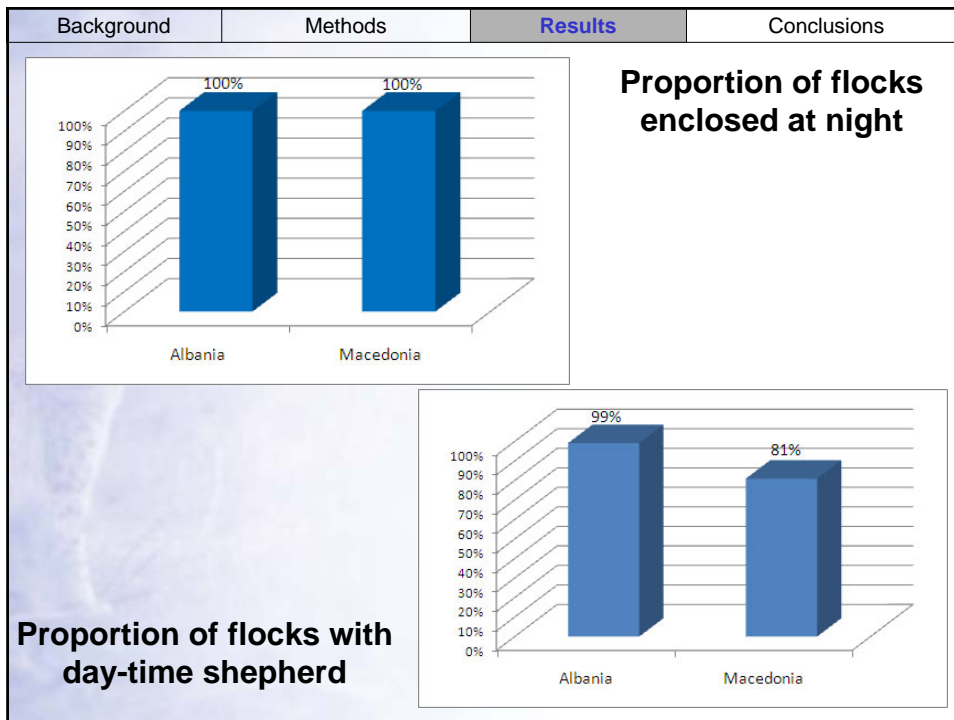
Background	Methods	Results	Conclusions
 		 	

Background	Methods	Results	Conclusions
<ul style="list-style-type: none"> ▪ Results from Baseline survey – visits to 136 10x10 km grid cells in potential lynx range – Albanian – Macedonian border ▪ 873 systematic interviews with local residents (key informants – not random) ▪ Questions about: <ul style="list-style-type: none"> - socio-economic status of the village - livestock husbandry - losses of livestock to wolves, bear, lynx - attacks on people and fear ▪ Interviewee profiles; <ul style="list-style-type: none"> Albania - 95% males – 54% owned livestock Macedonia – 99% males – 55% owned livestock 			





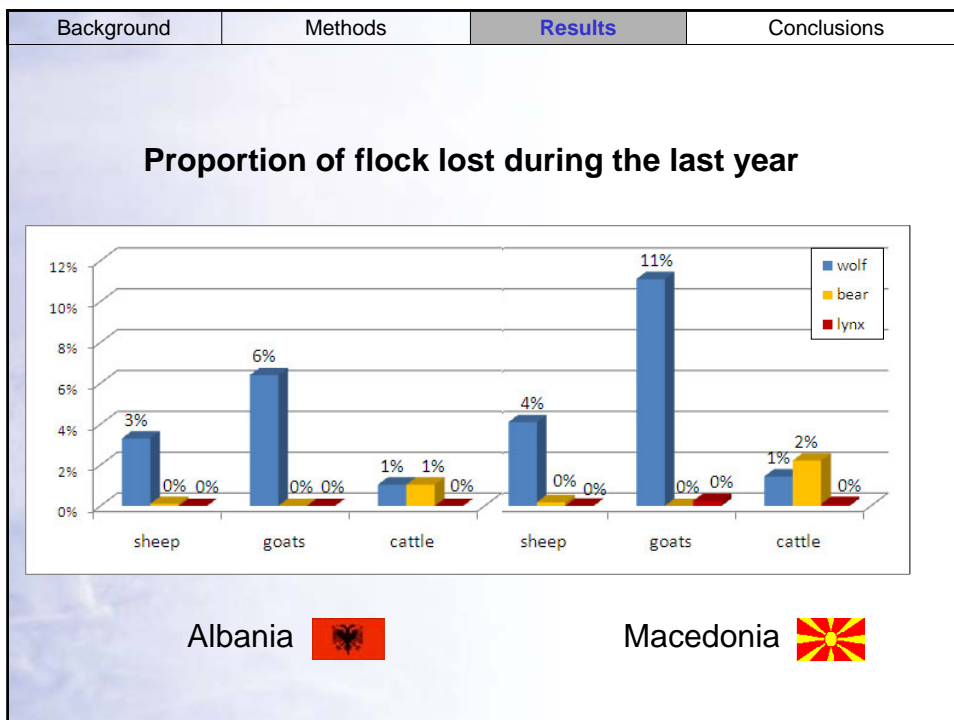
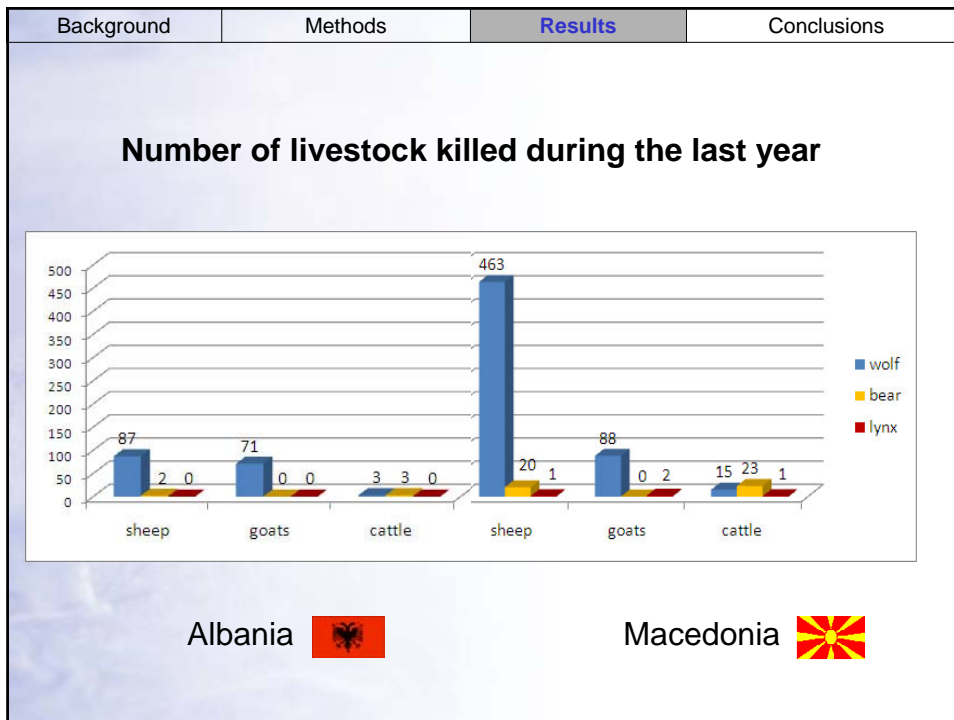
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<p><u>Livestock – the potential for conflict: Numbers and husbandry methods</u></p> <p style="text-align: center;">Trends in livestock in villages</p> <table border="1"> <caption>Trends in livestock in villages</caption> <thead> <tr> <th>Country</th> <th>Livestock</th> <th>decrease</th> <th>increase</th> <th>stable</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Albania</td> <td>sheep</td> <td>74%</td> <td>17%</td> <td>9%</td> </tr> <tr> <td>cattle</td> <td>74%</td> <td>16%</td> <td>10%</td> </tr> <tr> <td>goat</td> <td>76%</td> <td>15%</td> <td>9%</td> </tr> <tr> <td rowspan="3">Macedonia</td> <td>sheep</td> <td>93%</td> <td>3%</td> <td>4%</td> </tr> <tr> <td>cattle</td> <td>94%</td> <td>3%</td> <td>3%</td> </tr> <tr> <td>goat</td> <td>90%</td> <td>6%</td> <td>4%</td> </tr> </tbody> </table> <p style="text-align: center;"> Albania Macedonia </p>				Country	Livestock	decrease	increase	stable	Albania	sheep	74%	17%	9%	cattle	74%	16%	10%	goat	76%	15%	9%	Macedonia	sheep	93%	3%	4%	cattle	94%	3%	3%	goat	90%	6%	4%
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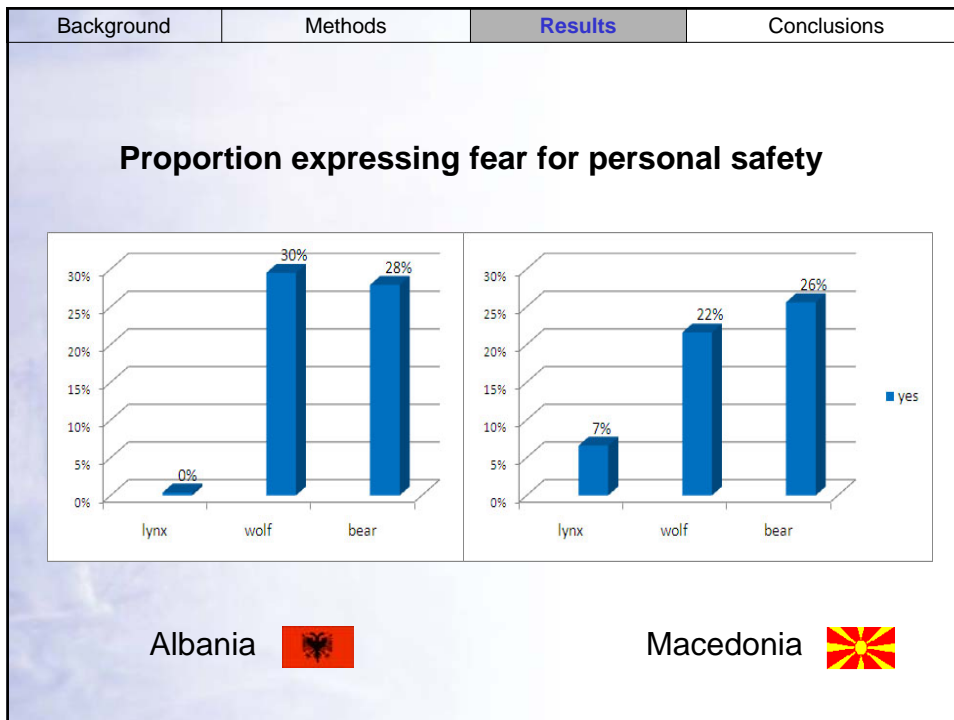
Background	Methods	Results	Conclusions
<p><u>Livestock – the potential for conflict: Numbers and husbandry methods</u></p> <p>Key points:</p> <ul style="list-style-type: none"> - Decrease in livestock numbers - Sheep are most abundant species - Dramatic differences in flock size between countries - Traditional husbandry methods still relatively intact - Conflict potential is low to moderate 			

Background	Methods	Results	Conclusions																															
<p><u>Livestock – levels and patterns of depredation</u></p> <p>Proportion of livestock owners reporting depredation during the last year</p> <table border="1"> <thead> <tr> <th>Country</th> <th>Livestock</th> <th>wolf</th> <th>bear</th> <th>lynx</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Albania</td> <td>sheep</td> <td>20%</td> <td>1%</td> <td>0%</td> </tr> <tr> <td>goats</td> <td>9%</td> <td>0%</td> <td>0%</td> </tr> <tr> <td>cattle</td> <td>2%</td> <td>1%</td> <td>0%</td> </tr> <tr> <td rowspan="3">Macedonia</td> <td>sheep</td> <td>38%</td> <td>0%</td> <td>1%</td> </tr> <tr> <td>goats</td> <td>14%</td> <td>0%</td> <td>1%</td> </tr> <tr> <td>cattle</td> <td>3%</td> <td>7%</td> <td>1%</td> </tr> </tbody> </table> <p>Albania </p> <p>Macedonia </p>				Country	Livestock	wolf	bear	lynx	Albania	sheep	20%	1%	0%	goats	9%	0%	0%	cattle	2%	1%	0%	Macedonia	sheep	38%	0%	1%	goats	14%	0%	1%	cattle	3%	7%	1%
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Background	Methods	Results	Conclusions
<p><u>Livestock – levels and patterns of depredation</u></p> <p>Key points:</p> <ul style="list-style-type: none"> - Wolves are responsible for most depredation. - Most killed livestock are sheep, but higher proportion of goats are killed. - Depredation levels are low to moderate. - Lynx cause almost no depredation. 			

Background	Methods	Results	Conclusions																								
<p><u>Attacks on people and fear</u></p> <p>Reported attacks on people during the last 5 years</p> <table border="1"> <thead> <tr> <th>Country</th> <th>Species</th> <th>Attacked</th> <th>Killed</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Albania</td> <td>lynx</td> <td>0</td> <td>0</td> </tr> <tr> <td>wolf</td> <td>25</td> <td>1</td> </tr> <tr> <td>bear</td> <td>27</td> <td>0</td> </tr> <tr> <td rowspan="3">Macedonia</td> <td>lynx</td> <td>7</td> <td>0</td> </tr> <tr> <td>wolf</td> <td>10</td> <td>0</td> </tr> <tr> <td>bear</td> <td>54</td> <td>0</td> </tr> </tbody> </table> <p>Albania </p> <p>Macedonia </p>				Country	Species	Attacked	Killed	Albania	lynx	0	0	wolf	25	1	bear	27	0	Macedonia	lynx	7	0	wolf	10	0	bear	54	0
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Background	Methods	Results	Conclusions
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Attacks on people and fear

Key points:

- Both bears and wolves are believed to attack people
- Only one death
- Levels of fear are low
- Nobody is afraid of lynx

Background	Methods	Results	Conclusions
<p>Conclusions:</p> <ul style="list-style-type: none"> ➤ Livestock are declining - medium sized flocks - traditional husbandry systems are still in place. ➤ Depredation is widespread. ➤ Losses are moderate – typical for region. ➤ Fear levels are low, especially for lynx. 			

Background	Methods	Results	Conclusions
<p><u>What does this mean for lynx conservation in region?</u></p> <ul style="list-style-type: none"> - Livestock conflicts not likely to limit lynx recovery in the region. - BUT... Lynx still get killed. <p style="text-align: center;"><u>Why?</u></p> <ul style="list-style-type: none"> - Must look for reasons other than livestock conflicts. 			