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Number and distribution of wolves in Italy

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Receipt of Ms. 10. 8. 1974

Introduction

There have been no reports on wolves in the Italian part of the Alps for the last 100 years. However, until about 20 years ago, wolves probably inhabited most of the Appennines, from Appennino Tosco — Emiliano to the very southern tip of Italy, Mt. Aspromonte in Calabria. There is no proved information on the exact former range of the wolf in the Appennines. But older people in many areas, no longer inhabited by wolves, say they remember times when wolves were common. They were said to be easily seen in winter around villages and towns even in areas of low altitude and wolf kills were reported in many areas.

The number and distribution of the wolf in the Appennines has never been known. According to recent rough estimates, only about 300 (SIMONETTA 1968) to 200 wolves (SIMONETTA 1971; TASSI 1971) were thought to have survived in the Appennine range.

The Italian National Appeal of the World Wildlife Fund started a campaign in order to save the wolf and, as a result, the wolf was ensured full protection from hunting, trapping and poisoning by a ministerial decree from Jan. 1, 1971 to Dec. 31, 1973. To have this decree prolonged, however, more precise information on the real status of the wolf in Italy was needed. A study on the number and distribution of the wolves in the Appennines therefore was conducted in the late winter, spring and summer of 1973.

Methods

Because of the enormous range that had to be checked for wolves (70.000 km²) an over all census could only be accomplished by indirect means. Such a method is by its nature open to a broad variety of possible errors. To test the results obtained by the indirect census a field census was carried out in a selected area covered before by indirect means.

The indirect census was done by:

1. Travelling the whole possible range of the wolf, e. g. middle and southern part of the Appennines from south of Florence to the south of Calabria, and check on the ecological conditions of those areas where wolves are supposed to have survived.
2. Interviewing people living in these areas.
3. Checking all recent reports on sightings and killings of wolves and of damage done by wolves.

The technique of interviewing as well as our behaviour had to change along with the different attitudes and cultural backgrounds of the people. Often we had to approach by talking of matters very different from wolves. Several glasses of wine were often necessary before the real interview could be started.

All interviews were informal. After a period of general talking a few standard questions were asked. To test the reliability of the informant(s) these questions were repeated in different forms during the talk. We soon found out that only those persons who had had direct personal experience with wolves were to be trusted, e. g. shepherds, forestry men, road maintenance workers, hunters, hunting wardens or other people that for any reason have to stay out in the field. The best information came from people having no direct affairs with wolves: shepherds and hunting wardens often tended to exaggerate while the forestry men, road workers and also some of the hunters gave more reliable information. Civil authorities like police, "carabinieri" or village mayors normally were not well informed.

There was a marked correlation between personal experience of wolves, absence of fear of wolves and reliability of the information given. Fear of wolves or the belief in wolves being dangerous to humans, as well as the belief that wolves cause enormous damage to livestock and game animals were positively correlated with lack of personal experience with, and general ignorance about, wolves.

The possible wolf range in the regions of Toscana, Marche, Umbria, Lazio, Abruzzi, Molise, Campania, Basilicata and Calabria was travelled through for a total of 34 days.

The direct census was carried out in the Maiella — Parco d'Abruzzo area (for area description see p. 105). The area was selected because part of it is a National Park and because of the relatively good number of wolves that have survived here.

Information on the number and movements of wolves was obtained by searching for, and following, tracks in the snow. In 3 cases information was obtained by howling to which wolves answered, and once a pack of 6 wolves was seen. Moving on snow was done on skis or snow shoes. When roads passed through the census area, the surrounding range was observed from cars. All co-workers had binoculars. In addition 2 telescopes were used.

Beside the 2 authors, 8 men (friends and members of the W.W.F. and park wardens from the National Parks of Gran Paradiso and of Abruzzo) helped to conduct the study. In Parco d'Abruzzo we had the added help of a further 10 wardens from the park.

The study was conducted from March 10—18, 1973.

Results

The northern limit of land inhabited by the appennine wolf is now at Mts. Sibillini, the southern limit at Monti della Sila. Within this range the distribution is restricted to mountain areas with the only exception of the "Agro Romano" area north of Rome. Communication between the wolves of these mountainous "islands" seems to be very difficult if not impossible. The "islands" are all surrounded by areas of low altitude with a high human population density and many old and new roads, suburban developments, factories etc.

The whole range of the Appennines was covered by the census, but this report only concerns those areas where wolves are still believed to have survived (see table).

Mts. Sibillini — Monti della Laga (Marche, Abruzzo, Umbria)

Approximate size: 1.900 km². *Area description:* Two major ranges. 1. North of river Tronto with the highest point of M. Vettore (2.478 m) and 5 other mountains over 2.000 m. 2. South of river Tronto with Monti della Laga and Mt. Gorzano (2.455 m) and the artificial lake of Campotosto. *Vegetation:* The northern part is mainly covered by beech forest up to 1.800 m. The southern part is a mainly

Extension of wolf inhabited areas and number of wolves in the Appennini mountains

Area	Appr. extension (in qkm)	Appr. number of wolves
1. Mts. Sibillini, Monti della Laga	1900	8
2. Altopiano delle Rocche, Mt. Velino, Mt. Sirente	750	5
3. Tarquinia — Tolfa	650	7
Campagnano — Agro Romano	450 1100	5 12
4. Maiella, Piano Cinque Miglia, Parco Nazionale d'Abruzzo	1500	21
5. Monti del Matese	400	3
6. Monte Cervialto, Polveraccio, Termino	300	8
7. Monti Alburni	120	4
8. Monti Sirino, Raparo, Alpi	275	4
9. M. Pollino, Campo Tenese, Catena Costiera	650	12
10. Monti della Sila	1650	25
Total	8645	102

open range pasture area. *Human population*: Most villages are situated at the edge of the area. The density is low. One road along the river Tronto crosses the area. *Livestock*: In the southern part sheep herds from the lowlands of Lazio are numerous in summer. There are few reports of damage done by wolves. *Estimated wolf number*: 8. Despite the fact that hardly any damage is done to livestock there are reliable reports on wolves.

Altopiano delle Rocche — Mt. Velino (2.487) — Mt. Sirente (2.350) (Abruzzo)

Appr. size: 750 km². *Area description*: The area consist of a high altitude plateau (mean altitude: 1.100 m) surrounded by mountains up to 2.400 m. *Vegetation*: Open pastures and scattered beech forest on the mountain sides up to 1.800 m. *Human population*: Originally low. Now highly exploited for skiing and accompanying tourist facilities. *Livestock*: A few sheep herds in summer. Hardly any damage has been reported over the last years. *Estimated wolf number*: 5. They will probably not survive very long due to the heavy human exploitation of the area.

*Tarquinia — Vetralla — Bracciano — Campagnano — Monti della Tolfa (Lazio)*

Appr. size: The limits of this area can hardly be outlined. A main part of about 650 km² consists of Monti della

Fig. 1. Areas in the Appennini Mountains inhabited by wolves

Tolfa and the plains to the north. Another 400 to 500 km² covers the adjacent area from the lake of Bracciano to the villages of Campagnano and Sacrofano. *Area description*: Rolling country with the highest peak, Monti della Tolfa only 616 m high. *Vegetation*: Cultivated and partly abandoned small fields, pastures, hedges and scattered bech and pine forest — the typical “agro romano”. *Human population*: Of low density centered in small villages. No industry, few paved roads and little traffic. *Livestock*: A good number of sheep and cattle herds graze here most of the year. Losses by wolves are rarely claimed. *Estimated wolf number*: 12. This is, compared with the other areas a very unusual wolf habitat. The area is much frequented by hunters and the hunting pressure on wolves is probably high. Killings are reported (2 during the winter 72 to 73). Still it seems wolves have managed to survive in this area, the only area outside the higher parts of the Appennines. The reason for this is probably to be found in the low human population density, the almost complete agricultural land use with no industry or other forms of so-called modern development and in the big ecological diversity of the area.

Maiella — Piano di Cinque Miglia — Parco Nazionale d'Abruzzo (Abruzzo)

Appr. size: Maiella range: 450 km², Cinque Miglia range: 400 km², Parco d'Abruzzo and adjacent areas: 650 km², Total: 1.500 km². *Area description*: (Figure 2) The area can be divided into 3 parts: 1. The Maiella range consists of a broad open valley from the village of Caramanico (602 m) over the pass of Guado di S. Leonardo (1.282 m) to the village of Campo di Giove (1.064 m) surrounded by the two rocky alpine ranges of M. Mileto (1.920 m), M. Mozzona (2.061) to the west and Montagna della Maiella (up to 2.737 m) to the east. 2. The Cinque Miglia is a high altitude flat and broad valley surrounded by a high mountain range to the west (M. Greco 2.285 m) and a more soft rolling hill area to the east. 3. Parco d'Abruzzo and the adjacent areas consist of partly rocky alpine mountain ranges, of rolling hills and both narrow and broad valley systems of an altitude down to 800 m. The 3 areas are connected with each other by high altitude passes. *Vegetation*: The Maiella and the Cinque Miglia ranges are mainly open pastures and alpine meadows as in Parco d'Abruzzo except that here there are also large, partly virgin beech and pine forests. *Human population*: Maiella range: low. Some small villages in the lower part of the valley. One ski hotel at the pass Guado di S. Leonardo. Piano di Cinque Miglia: some smaller and bigger villages and the town of Roccaraso, biggest ski resort in the central Appennines. Most ski and tourist activities are centered here. Some more ski facilities at Campo di Giove. Parco d'Abruzzo: some villages and the town of Pescasseroli in the valleys. Extensive ski facilities at Pescasseroli and the surrounding mountains. *Livestock*: sheep herds of up to 2–3.000 animals each graze the whole area from June until the end of October, November. They are herded by 1–3 shepherds and many dogs. In addition smaller local herds of sheep and goats graze the area almost all year around. At night the sheep are mostly kept in small enclosures. There is a steady decline in the number of herds as well as the number of sheep in the herds partly because shepherds give up their jobs.

Damage by wolves is reported every year, mostly in the month of June, end of September, October and November (the summer tourist season lasts from around July 15 to September 15). According to the information given by the shepherds there were up to 8 sheep herds with about 7.000 animals in the Maiella area during the 1972 season. On August 2, 20 sheep were killed at night in an enclosure. Until the end of September no more attacks were noticed. In October the wolves

population: Originally low. Today there is an expanding tourist industry around one major ski resort. *Livestock:* A few sheep herds in summer. No damage reported in the last 3 years. *Estimated wolf number:* 3. Until 10 years ago the Monti del Matese was supposed to be "classical" wolf country. Shepherd claim that some wolves still exist but evidence is poor. In the last 3 years there have been no authentic sightings of wolves. However, since most probably wolves were still living in the area 3 years ago, we think it is possible that some wolves have survived here.

Irpinia: Monte Cervialto (1809) — Monte Polveracchio (1790) — Monte Terminio (1783) (Campania)

Appr. size: 300 km². *Area description:* Rocky, wild, uncultivated mountain range. *Vegetation:* Partly virgin beech forest. Scattered open pastures. *Human population:* No settlements except a growing tourist centre at Lago Laceno. *Livestock:* During summer sheep and also some cattle herds graze in the area. No mass slaughters by wolves are reported but occasionally a few sheep or a calf are said to be killed. *Estimated wolf number:* 8. There were no reports on sightings of packs consisting of more than 3 wolves. Local people think that the wolves either live solitarily or in pairs.

Monti Alburni (Campania)

Appr. size: 120 km². *Area description:* Open, gentle, high altitude country with 2 mountain ranges up to 1742 m. *Vegetation:* Mainly open pastures. *Human population:* Low density. Few small villages situated at the edges of the area. *Livestock:* Cattle herds in summer. After 3 years of silence, 7 cows were reported killed in October 1972. *Estimated wolf number:* 4. There is a slight possibility that some isolated individuals also have survived at Mt. Cervati (1899), Mt. Motala (1700) south of M. Alburni.

Monte Sirino (2005) — Monte Raparo (1761) — Monte Alpi (1892) (Basilicata)

Appr. size: 275 km². *Area description:* Highly erosive, rocky, open mountain range. *Vegetation:* Open mountain pastures. Hardly any forest. *Human population:* Low density and until now no tourist facilities. However, ski lifts and relative constructions are planned. *Livestock:* Cattle herds in summer. In winter the herds are moved down to the winter ranges along the sea coast. Damage is seldom reported. *Estimated wolf number:* 4. There are reports that the wolves follow the cattle into the winter range.

M. Pollino — Campo Tenese — Catena costiera (Basilicata, Calabria)

Appr. size: 650 km². *Area description:* Wild, rocky, high altitude mountain area with two alpine ranges up to 2271 m (Serra Dolcedorme), connected by the highland of Campo Tenese. *Vegetation:* Beech and silver fir forest and open alpine meadows and pastures. *Human population:* Originally very low. Now there is a large scale tourist development in progress. The area is crossed by the Autostrada Napoli — Reggio Calabria. *Livestock:* A few cattle herds. Hardly any damage reported. *Estimated wolf number:* 12. Only sightings of single wolves or small packs are reported.

Monti della Sila (Calabria)

Appr. size: 1650 km². *Area description:* The 3 mountain ranges of Sila Greca, Sila Grande and Sila Piccola have many peaks of around 16–1700 m with a maximum of 1928 at Botte Donato. *Vegetation:* Mainly dense forest of beech and Calabrian pine. *Human population:* Originally low. Today the tourist industry is well developed in many parts of the area. *Livestock:* Cattle herds mainly at the edges of the area. *Estimated wolf number:* 25. Again local people report that they normally see only 1, sometimes 2 or 3 wolves at a time.

We estimate the total number of wolves living in the Appennines to be around 100. Their distribution is today restricted mainly to high isolated mountain ranges. The total area inhabited by wolves is around 8500 km², e. g. 12% of the 70,000 km² Appennine range. The average population density of approximately 1 wolf per 85 km² must be considered low compared with other comparable wolf habitats (MECH 1970; PIMLOTT 1967; BIBIKOV 1973). However, taking in account the very poor food situation for the wolves (see below), the relatively high human population density even in the higher parts of the Appennines, the unprotected status of the wolf until Jan. 1, 1971 and the common use of poison in predator control it seems astonishing that wolves have survived at all.

In all the mountain "islands" where wolves have managed to survive the natural big prey species — Red Deer (*Cervus elaphus*), Roe Deer (*Capreolus capreolus*) and Chamois (*Rupicapra rupicapra*) — have been exterminated except for the small chamois population and some few reintroduced red deer in and around the Abruzzo National Park.

In the areas north of Monti del Matese summer grazing of sheep is common. The wolves do some damage. Grazing cattle are normally kept in pastures close to the villages. Except for a few calves taken each year, little damage to cattle is reported. Horses are hardly ever killed. Some dogs are killed and eaten, mainly in winter.

South of Monti del Matese cattle is the main domestic species grazing on the mountain pastures and meadows during the summer. Few attacks are reported. Some sheep and goats are taken and quite a few dogs are reported killed each year, again mainly during the winter.

Despite the comparable little damage done by wolves some hunters in the south seem to push hard towards the total elimination of the wolf. We got the impression that they have little respect for the wolf protection law.

We have little information on the number and behaviour of feral dogs in the Appennines. However, it is most likely that some of the damage reported to have been done by wolves has to be attributed to feral and other free running dogs.

The direct census*Maiella range*

Early in the morning on March 12 — after 24 hours of heavy snow fall — deep tracks of wolves were found coming down from the slopes of M. Mileto going into the ravine south of the road from Pacentro to Guado di San Leonardo. By backtracking and walking out all the tracks, tracks of 6 wolves could be distinguished. In the evening we heard soft howling from down the ravine when walking above on the road. To human howling the wolves answered at once. Some minutes later we saw 6 wolves playing in the snow at the bottom of the ravine.

No other wolf tracks were seen on that day.

The next day, all efforts were concentrated on following the movements of the wolves seen the night before. No tracks were seen going out of the ravine nor were any new tracks found inside the ravine when walking through on snow shoes. No answer was given to human howling, nor were there any signs of wolves in the ravine. It therefore seems very likely that all the wolves had moved out of the ravine by early morning at the latest. The only possible way out making no tracks was on the hard covered, snow cleared road.

On the same day many tracks of big canides were found close to a cowshed outside the village of S. Eufemia. All dogs were supposed to have been locked in during the night. Later tracks of at least 5 wolves were seen coming from S. Eufemia and going up towards the Maiella mountains.

It seems most likely that these tracks were made by the same wolves seen last night in the ravine. The road distance between the ravine and S. Eufemia is 16 km.

No tracks were seen going towards or coming from the Cinque Miglia area. We can therefore conclude that at least 6 wolves stayed in the area during the study.

Cinque Miglia

The area was covered on March 14, moving by car on the 3 roads going through the area and on skis.

Tracks of an unknown number of wolves were seen above the village of Rocca Pia (1158 m). Other tracks of at least 2 wolves were followed south-east of the road through Piano di Cinque Miglia. No other tracks were seen on that day. Over 1400 m the snow was still deep and soft. No tracks, not even fox tracks, were seen. We therefore can exclude all movements of wolves from the Cinque Miglia area over the range of Serra Sportera, M. Pratello, M. Greco into or from the Parco d'Abruzzo area during the time of the study.

Employees at the Hotel Piano Cinque Miglia reported that they had seen a pack of up to 6 wolves around the hotel on many occasions this winter. The wolves killed and partly ate one dog. The remains were poisoned. One wolf came back to eat on the remains and was killed. The body and teeth of the wolf were examined. It was probably a young, 10 month old female wolf.

During the time of the study at least 2 but probably 5 wolves stayed in the area.

Parco d'Abruzzo

On March 16, after 32 hours of heavy snow fall, the whole Parco d'Abruzzo range was searched by 20 men in all.

No tracks of wolves were seen in any region with deep soft snow, e. g. over 1300 m. Tracks of at least 2 wolves were seen just outside the park border close to the road to Gioia dei Marsi at km 29. Local people reported that wolves had killed 7 and on another occasion 3 sheep during the last days. They also reported having seen a pack of 4 wolves at km 22 7 days before. Close to a sheep pen outside the village of Villetta Barrea (1031 m) tracks of probably wolves, at least 2, one bigger and one smaller, indicated considerable movement. The tracks left the village in the direction of Rocca Tre Monti. Here they were found again. Now tracks of at least 3 wolves could be discriminated. They were followed to the feeding place where they intermingled with many fox tracks. (This wolf pack is fed during the winter by park wardens).

1 km south-east of Pescasseroli probable wolf tracks of at least one animal were going straight up the hill side in the direction of Valle Filatoppa.

No other wolf tracks were seen on that day.

The next day tracking was difficult because of the hard snow cover. Possible wolf tracks were seen in the lower part of Valle del Schienacavallo 2 km west of Pescasseroli. In the evening a pack of probably 4 wolves answered to human howling from the forest above the feeding place.

On March 18 the north-eastern part of the area was covered, travelling by car.

Probable wolf tracks were seen high up about 1700 m on the northern slopes of M. Godi (2011 m).

Around the village Scanno (1041 m) many new and old tracks were found. Most of the tracks were probably made by wolves because the tracks went from and to a steep and rocky, inaccessible area above the village. One man of the village said he had seen 3 wolves a night ago and 2 wolves the night before.

In all, tracks of wolves were seen in at least 3 different parts of the Parco d'Abruzzo range: at the road to Gioia dei Marsi, around Villetta Barrea and the feeding place, and at and above Scanno, maybe also at Pescasseroli. It is very unlikely that the tracks were made by the same wolves in all locations. The deep snow in the higher regions makes travelling over the mountain ranges separating the 4 locations improbable. Even moving on roads the locations are all at least 15 km apart.

If the tracks around Pescasseroli were made by wolves it is possible that they were made by the same wolves who stayed around the feeding place. Communication between the other 3 locations, however, can be excluded.

Therefore we can count at least 8 wolves in the Parco d'Abruzzo area. Probably there are some more, maybe around 12 living in 3 or 4 packs of 3 to 4 wolves each. This corresponds well with the information the director of the Parco d'Abruzzo has concerning the number of wolves in this area (TASSI 1971). For the whole study area we counted at least 16 wolves. The most probable number is 21, maybe a few more.

Range and movements

No wolf tracks below 900 m and only once wolf tracks over 1300 m (at 1700 m on the slopes of M. Godi) were seen. In winter during the time of deep snow in the mountains the range of wolves therefore seems to be limited to an area of high altitude valleys and passes above the region of dense human settlements and below the high mountain region.

Most tracks were found close to villages situated below mountain passes: Pescasseroli, Scanno, Villetta Barrea, Rocca Pia, S. Eufemia. Fox tracks in great number were also seen here. This indicates that individuals of both species look for eatable things, either domestic animals or garbage which is dumped in large quantities outside these villages. From what we saw from the tracks and heard from local people, the wolves only come to or move around the villages at night. In the daytime they retreat into inaccessible areas. During the summer they are almost never seen close to human settlements. Recent studies on the ecology and behaviour of the Appennine wolf show, however, that the wolves also come close to villages looking for eatable things during the summer (ZIMEN and BOITANI, in prep.)

The wolves obviously avoided moving in deep snow as much as possible. When moving in deep snow they did this in single file and backtracking was common. Detours were made to take advantages of wind swept ridges, of southern slopes or of rocks around which the snow melts faster. Some tracks were seen going straight up or down steep mountain slopes. Probably much travelling is done at night on snow cleared roads. Pack splitting was usual.

Winter food habits

We have little information on what the wolves live on in winter. One thing, however, seems certain: except for the pack being fed in the National Park, wolves have very little to eat in winter. All our observations indicate that the wolves partly live on garbage found around the mountain villages. This would make competition with foxes, who seem much better adapted to such a living, a serious threat to the wolves.

We have some information on successful preying on dogs: 1 big dog at the Hotel Cinque Miglia, 1 big female dog with her 2 cubs in S. Eufemia at night, March 10. In S. Eufemia the wolves were also supposed to have broken into a pig shed and killed some pigs. The killing of domestic animals inside villages, however, is certainly not often done because the animals normally are closed in at night.

Tracks of some hares (*Lepus europaeus*) were seen but it is doubtful that the wolves are able to kill many. Other potential prey is foxes and rodents.

Discussion

The results of both the indirect and the direct census only give a rough estimate of the real status of the wolf in the Appennines. However, despite the uncertainty about the exact number, the wolf must be considered a highly endangered species in Italy. The pattern of distribution is particularly alarming. The wolf population is divided into small almost completely isolated groups or individuals. There seems to be little hope for the survival of the wolf in many of these isolated mountain "islands".

Beside the hunting and poisoning and the lack of natural prey the reason for the fast decline of the Appennine wolf population in the last years is probably to be found in the development of human population activities. Ski and tourist facilities and activities are rapidly changing the structure of these last mountain refuges of the wolf.

From this short study any detailed conclusions for necessary steps to save the wolf in Italy cannot be made. However, 6 obvious facts must be considered in all further wolf management programs:

1. Protection of biotope. No further extensive developments, especially for the tourist industry, in all areas inhabited by wolves.
2. Complete year-round protection from hunting, trapping and poisoning.¹
3. Prohibition of the use of poison in fox management at least in all wolf areas.
4. Reintroduction and protection of native herbivores in all wolf areas. Until big game populations have been built up, winter feeding seems indispensable.
5. Compensation to the shepherds and farmers for all damage done by wolves.
6. Education of the public on the role and the real nature of the wolf.

Summary

The number and distribution of the wolf in Italy was investigated by an indirect census over the whole Appennine range. To test accuracy of the information obtained by the indirect method, a direct field census was conducted in a selected area covered before by indirect means.

¹ The ministerial decree for the full protection of the wolf in Italy has been prolonged until the end of 1976.

Around 100 wolves were counted over the whole Apennine range. The northern limit is today Mts. Sibillini, the southern limit at Monti della Sila. Within this range the distribution is restricted to high altitude mountain areas so that the population is divided into small isolated groups.

The direct census counted at least 16 and found 21 the most probable number of wolves in the 1500 km² large Maiella — Parco d'Abruzzo range.

One of the reasons for the fast decline of the wolf population in the last years is believed to be the extensive development of tourist industry in the last high altitude refuges of the wolf. The wolf must be considered a highly endangered species in Italy. Some proposal for further wolf management programs are made.

Zusammenfassung

Anzahl und Verbreitung von Wölfen in Italien

Ziel dieser Arbeit war es, die heutige Verbreitung und Anzahl der Wölfe in den Apenninen zu erfahren. Im Frühjahr und Sommer 1973 wurde eine Befragung unter der einheimischen Bevölkerung in großen Teilen des apenninischen Gebirgszuges durchgeführt. Um die Zuverlässigkeit der so gesammelten Informationen zu überprüfen, wurde in einem ausgewählten und vorher durch die indirekte Methode bearbeiteten Gebiet eine direkte Zählung im Feld durchgeführt.

In den gesamten Apenninen wurde der Bestand auf ungefähr 100 Wölfe geschätzt. Die Verbreitung des Wolfes beschränkt sich heute auf ca. 8500 km² oder 12 % des 70 000 km² großen apenninischen Gebirgszuges. Das nördlichste Vorkommen liegt heute bei Mts. Sibillini, das südlichste bei Monti della Sila. Innerhalb dieses Gebietes ist die Verbreitung des Wolfes auf höher gelegene Gebirgsgegenden beschränkt. Dadurch ist die Gesamtpopulation aufgeteilt in kleine, voneinander isolierte Gruppen.

Die direkte Zählung in dem Maiella-Parco d'Abruzzo-Gebiet ergab, daß hier mindestens 16, vermutlich aber um die 21 Wölfe leben. Dieses Ergebnis stimmt weitgehend mit dem Ergebnis der vorher durchgeführten indirekten Zählung überein.

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Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Mammalian Biology \(früher Zeitschrift für Säugetierkunde\)](#)

Jahr/Year: 1974

Band/Volume: [40](#)

Autor(en)/Author(s): Boitani Luigi, Zimen Erik

Artikel/Article: [Number and distribution of wolves in Italy 102-112](#)