22

Efforts to Implement Wildlife and Green Corridors in the State (Land) of Salzburg (Austria)

The securing of wildlife corridors was the subject of an unfinished amendment to the Salzburg State Spatial Development Programme of the State (Land) of Salzburg (LEP 2003) already over 10 years ago. This contribution goes back to the various initiatives that were taken - more or less successfully - to include in the state spatial development and regional programmes those corridors that are intended to ensure the permeability of the spaces for wildlife.

he links between habitat fragmentation and biodiversity loss can be assumed to be known. Leitner et al. (2016, p. 40) note that according to the metapopulation model (...) the ability of species to survive in landscapes depends on the population size on the one hand and on the possibilities for re-colonisation on the

other. The second component in particular is extremely negatively influenced by current trends in settlement development and by the expansion of the transport infrastructure. From this point of view, the measures called for in national and international conventions, guidelines and also laws to maintain and restore the biotope network by means of "green infrastructure" are necessary, and the frequently expressed wish for rapid enactment of implementation measures in spatial planning instruments is understandable (e.g. Arming et al., 2016, pp. 8-11).

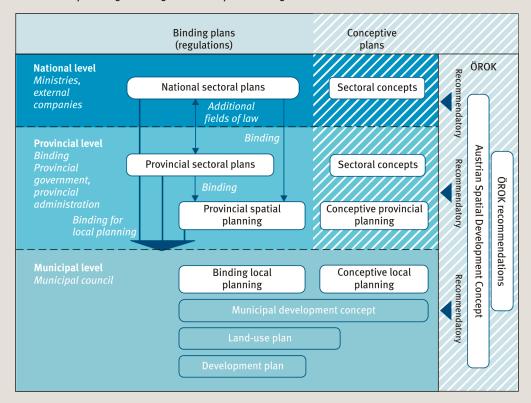
Developments in the area of tourism infrastructure in particular have further aggravated the situation in the mountainous regions over the last two decades. The built-up areas in the State (Land) of Salzburg¹ alone increased by 4.5 percent between 2009 and 2014 state-wide and, in regional terms, most strongly in the mountainous regions (Pinzgau: + 6.2%, Pongau + 6.1%), as stated in the last Regional Spatial Development Report of the State (Land) of Salzburg (ASL (Amt der Salzburger Landesregierung, office of the Salzburg State Government, 2016, p. 209).

The failed attempt of laying-down wildlife corridors in the State Spatial Development Programme in the years 2007 to 2008

The securing of wildlife corridors was already an issue in the years 2007 to 2008 in an unfortunately unfinished amendment to the LEP 2003 of the State (Land) of Salzburg. In 2005 a study by the University of Natural Resources and Applied Life Sciences (Köhler et al., 2005) had proposed sites for corridors for large wild mammals. The securing of these sites from construction and sealing was to be laid down by order in the regional programmes of the regional planning associations or in the municipal spatial development concepts. To this end, the existing measure in the State Spatial Development Programme (LEP 2003 Chapter C1, Measure 2, p.26) - according to which "supra-local and local landscape belts and green belts as well as greenways and small green corridors of spatial structural importance" are to be secured by the State (Land), the regional planning associations or the municipalities in their respective instruments - was to be made more precise by adding the following sentence: "This should also take into account the appropriate crossing areas for large wild mammals along the high-level transport network." A map illustrated what exactly this meant.

^{1.} The Republic of Austria is a federal state consisting of nine states or "Länder". The word "State" refers in this text always to the Federal State of the Land of Salzburg.

• Relationship of planning instruments at the various planning levels in Austria. The State Development Programme and the regional programmes belong to the "Provincial Level" in this picture. The "Local Development Concept (REK)" and the land use plan in Fig. ● belong to the Municipal Level in Fig. ●



This amendment procedure contained in addition to the wildlife corridors a further four selective amendments to the 2003 LEP. Though it was completed from a technical point of view in summer 2008, it was not submitted to the State Government for collective deliberation during the 14th legislative period of the Salzburg State Parliament that ended in March 2009 (see in detail the Spatial Development Report (ROB) 2010, pp. 231-233). After the state elections in 2009 political responsibility changed, the topic "amendment of the State Spatial Development Programme" was off the table for the time being and was only taken up again after the next but one state elections in spring 2013 at the beginning of the 15th legislative period of the State Parliament (2013-2018).

Securing green corridors in Pinzgau

However, it was possible to ensure that the locations of the wildlife corridors were taken into account in the preparation of the regional programmes for the two regional planning associations Pinzgau and Oberpinzgau². These two regional programmes were developed in a multiannual joint project from 2011 to 2013 and declared binding by the State Government on 1 March 2014 (LGBI. (Landesgesetzblatt, State Law Gazette) No. 18/2014 and 19/2014). As Gerlinde Born and Habenicht (2014, pp. 65-66) reported, the two regional planning associations had set themselves the goal of keeping certain areas in the region free of development by designating them "green corridors". The State (Land) of Salzburg, the regional planning association and the hunters' association jointly commissioned a habitat mapping study as a basis for the identification of the green corridors (Leitner et al., 2012). It identified 56 corridors that are currently still functional in terms of permeability for large-area, forest-dependent wildlife species (Born & Habenicht 2014, S. 65). Of these, a total of 30 supra-regional and regional corridors were included as priority zones in the regional programme Pinzgau (20 corridors) and Oberpinzgau (10 corridors) in order to ensure long-term ecological functionality. The corridors must be specified in the spatial development concepts of the municipalities.



^{2.} The political district of Zell am See is colloquially known by its historical name "Pinzgau". This administrative unit is divided into two regional planning associations, called "Regionalverband Oberpinzgau" and "Regionalverband Pinzgau". The Pinzgau regional planning association therefore only covers the areas of Mitter- and Unterpinzgau, while the sub-region of Oberpinzgau is an independent regional planning association. For this reason, the regional programme, which was actually drawn up jointly, is formally divided into two regional programmes. The two regional programmes and the corresponding planning maps can be found on the Internet under the following links:

Pinzgau regional programme - Planning Map:

https://www.salzburg.gv.at/bauenwohnen_/Documents/regionalprogramm_rv_pinzgau_programmkarte_zentralraum_unterpinzgau_internet.pdf

Upper Pinzgau regional programme - Planning Map:

 $[\]checkmark$ https://www.salzburg.gv.at/bauenwohnen_/Documents/regionalprogramm_rv_oberpinzgau_programmkarte_internet.pdf

The section of the Oberpinzgau Planning Map shown in Figure ② contains supra-regional and regional green corridors in addition to other planning specifications.

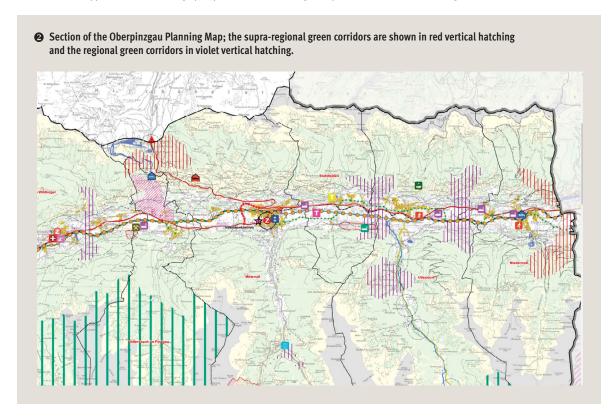
The following mandatory measure is to be found in the regional programme for these corridors: "The defined supra-regional, extensive green corridors are to be maintained as connecting corridor and kept free of uses in local spatial planning that prevent the proper functioning of the corridor (designation of extensive green corridors in the Local Development Concept (REK)). The use, development or zoning of building land within the green corridors is possible if the permeability and thus the supra-regional function (passability for wildlife) of the corridor is not significantly impaired or the impairment (e.g. noise, light) can be reduced by appropriate compensatory measures (small green corridors, green structures...)" (regional programme Oberpinzgau 2014, p. 17)³.

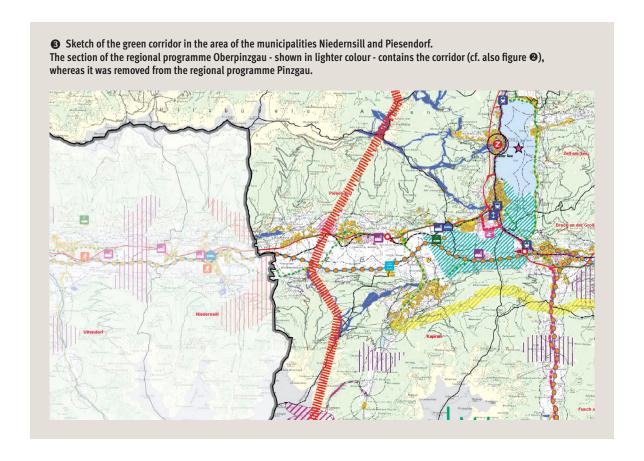
However, the development of the regional programme was not without friction and also caused media excitement, which ultimately even led to a State Parliament initiative and subsequently to the deletion of a corridor in the border area of the two regional planning associations. The Oberpinzgau region in particular always feels over-regulated in the area of nature conservation and had therefore forgone green corridors in the first adopted draft version of the Oberpinzgau regional programme

(Born & Habenicht 2014, p. 65). However, the summarising statement of the regional planning authorities made it possible for the regional planning association to start its own process under the title "nature development strategy", in the course of which - accompanied by the commissioner for nature conservation- green corridors were defined and anchored in the regional programme ⁴. The State Press Service (Landeskorrespondenz) reported on 1 August 2013 that the mayor of Oberpinzgau recently approved the inclusion of 56 green corridors in the regional programmes of Pinzgau ⁵.

However, a municipal councillor of a populist party began to make a stand against the intended designation of a green corridor in the area of the border between the two regional planning associations. In a parliamentary question of 4 June 2014, the FPÖ (Freiheitliche Partei Österreichs, Freedom Party of Austria), members of parliament wanted to know from Astrid Rössler, the responsible deputy governor, on what legal basis the designation of wildlife corridors was carried out, whether landowners had legal remedies against it, whether there had been objections and what restrictions on use the landowners had to expect 6. In her reply to the guestion on 15 July 2014, the head of department attempted to explain the technical necessity for this in more detail and clarified that there were no restrictions on agricultural use⁷.

- 3. The wording is the same for the regional green corridors Note F.D.
- 4. Landeskorrespondenz of 1 July 2014: "Designation of green corridors for wild animals in Pinzgau":
- https://service.salzburg.gv.at/lkorrj/Index?cmd=detail_ind&nachrid=53089
- 5. Landeskorrespondenz of 1 July 2014: "Green corridors in Pinzgau included in regional programme":
- $\begin{tabular}{ll} $$ $$ $$ https://service.salzburg.gv.at/lkorrj/Index?cmd=detail_ind&nachrid=51378 \end{tabular}$
- 6. No. 675 of the Supplements to the stenographic protocol of the Salzburg state parliament, 2nd Session, 15th Legislative Period.
- 7. No. 64 of the Supplements to the stenographic protocol of the Salzburg state parliament, 3rd Session, 15th Legislative Period.





This eventually also led to reports in the regional newspapers and caused the cross-border supra-regional green corridor, which was located in the municipal areas of Niedernsill (regional planning association Oberpinzgau) and Piesendorf (regional planning association Pinzgau), to be removed during deliberations over the two regional programmes.

Due to a communication error in the deliberation over the two regional programmes, the politically established removal of the green corridor in the area of the two municipalities of Niedernsill and Piesendorf was only carried out on the planning map for Pinzgau. Thus there is the curious situation of only one half of a corridor, i.e. the green corridor leading across the two municipalities is only defined in the Planning Map for Oberpinzgau (see Figure §). This led to the initiation of an amendment procedure in 2016, which was only recently concluded (Order of the Salzburg State Government of 15 April 2019 amending the regional programme "Oberpinzgau", LGBI. (Landesgesetzblatt, State Law Gazette, No. 32/2019).

The example of another green corridor at the pass Thurn in the municipality of Mittersill shows just how sensitive the situation is. In 2014, a green corridor was designa-

ted in the area of the Wasenmoos and Resterhöhe (see Figure **4**). At the edge of this green corridor, the municipality designated in 2012 a large area for a large-scale accommodation facility and an area for secondary residences. These land use zones were approved in 2013 by the State Government at the time and are currently leading to fierce disputes, because after the start of construction it became apparent that luxury chalets in a class of their own were being built, costing between 5 and 9 million euros 8. In a parliamentary question of 21th October 2019, the SPÖ (Sozialdemokratische Partei Österreichs, Socialdemocratic Party of Austria), members of parliament asked about this project and brought this problem to the attention of the public 9. The following discussion in the parliament in December 2019 between SPÖ and the government resulted in stricter regulation against chalet-projects 10.

In the area surrounding the green corridor, many projects are planned on the basis of pre-existing zonings, which were established as such more than 10 years ago. It is to be feared that the implementation of all projects in preparation is not compatible with the protective purpose of the green corridor.



^{8.} Salzburger Nachrichten, local edition, from November 4, 2019, pp. 1-3: "Luxury project in Mittersill: the E-Porsche is included with the chalet. A superlative tourism project is rising from the ground at Pass Thurn near Mittersill. The operators rave, the critics see excesses. The luxury chalets cost 5.5 million euros upwards".

Source: 🕆 https://www.sn.at/salzburg/politik/luxusprojekt-in-mittersill-zum-chalet-gibt-es-den-e-porsche-gleich-dazu-78651160 © Salzburger Nachrichten VerlagsgesmbH & Co KG 2019

^{9.} No. 49-ANF of the Supplements to the stenographic protocol of the Salzburg state parliament, 3rd Session, 16th Legislative Period.

^{10.} Minutes of the parliament session of 11th December 2019, page 240-242,

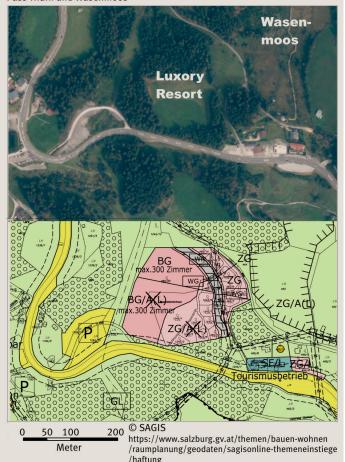
https://www.salzburg.gv.at/00201lpi/16Gesetzgebungsperiode/3Session/3s3s16gp.pdf

Overall revision and redrafting of the State Spatial Development Programme

As already mentioned above, the original idea was only taken up again at the beginning of the 15th legislative period. In the project report on a - by then planned overall revision of the State Spatial Development Programme, it was stated that "in order to secure the crossing areas for large wild mammals proposed in a study by the University of Natural Resources and Applied Life Sciences from building and sealing (...) these crossing areas should be defined in the regional programmes and spatial development concepts as green ways or small green corridors The necessary conceptual foundations and core contents for this are to be laid by supplementing the existing Measure 2 in Chapter C.1 of the 2003 LEP." (Project Report 2013, p. 17)

Section of the zoning plan of the municipality of Mittersill in the Pass Thurn area in the lower part of the picture. The classification of the land for the development of the luxury resort as a building zone for secondary residences and for a large-scale accommodation facility with a maximum of 300 rooms can be seen in pink near the curve. The oblique aerial photograph shows the area, where the luxury resort is planned. On the right side of the picture, the valuable Waasenmoos (Ramsar conservation area) is clearly visible behind the existing buildings (an aparthotel and some single-family houses).

Pass Thurn and Wasenmoos



Due to a lack of structural analysis, which led to criticism from planning stakeholders, the then Department of Spatial Planning was commissioned in summer 2014 to prepare a comprehensive structural analysis and to repeat the engagement procedure after its completion. The repetition of the 1st hearing procedure was initiated in April 2016. Processing the numerous comments took until autumn of that year and the preparation of a first discussion draft in accordance with the now extensively amended Spatial Planning Act took a period of 2 years. It was therefore only towards the end of the 15th legislative period that the proposal of the LEP working group could be forwarded to the member of the government in charge.

In this proposal, which was referred to as "building blocks for a new State Spatial Development Programme according to the 2017 amendment to the ROG", a measure was formulated in the new version of the LEP, commonly known as the LEP-Neu, that required the habitat corridors (see Figure 6) to be spatially delimited in accordance with the so-called "habitat mapping study" (available on the Internet at www.lebensraumvernetzung.at) within the framework of regional and local planning (ASL 2018, p. 79). However, this proposal was not a final draft, as various stakeholder groups were to work it out as part of a comprehensive participation process. This did not happen, though, due to the change in departmental responsibility after the state elections in 2018.

Based on the preliminary work, a new proposal is currently being drafted on behalf of the government member responsible since June 2018. The tendency here is to include in the objectives for open space development at least a binding target to keep habitat corridors and biotope networks between core habitats free. It is part of the current discussions whether this objective will be specified by commissioning the subsequent planning levels or directly in the State Spatial Development Programme. From a technical point of view, it would be possible and also desirable to enforce a direct specification in the State Spatial Development Programme and in these cases to restrict the municipal planning sovereignty for supra-local reasons. Although the habitat mapping study (see Figure 6) provides a sufficient technical basis, the required political will for this must first be forged through discussions between the State (Land), regional planning associations and municipalities.

The author

Franz DOLLINGER*

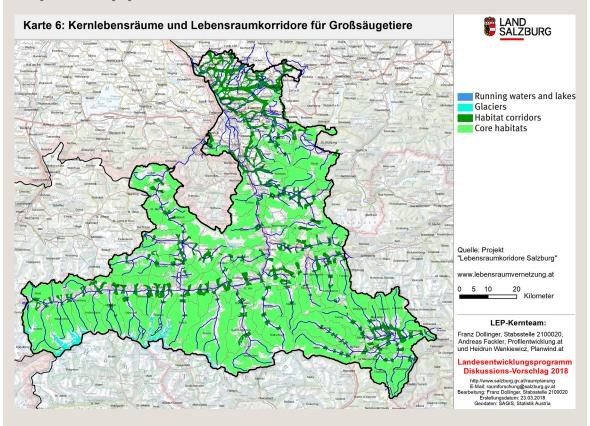
Office of the Regional Government of the State of Salzburg,
Department of Living and Spatial Planning.
*Retired by December 2020.
Billrothstraße 13, 5020 Salzburg, Austria.

† franz.dollinger@hotmail.com

Acknowledgements

The author thanks Alessandra G. RIVA for the competent English translation of the original German contribution.

6 Map of core habitats (and habitat corridors) for large mammals in the State (Land) of Salzburg. The running waters and lakes in the territory of the state are shown in blue, the glaciers in light blue, the habitat corridors in dark green and the core habitats for large mammals in light green.



LEARN MORE...

- ARMING, C., HANNES A., BRAMESHUBER, S. et al., 2016, Analyse des bestehenden Natura-2000-Netzwerkes im Bundesland Salzburg, Österreich, Salzburg: Netzwerk:natur Salzburg, 161 S.
- ASL, 2016, Amt der Salzburger Landesregierung, Hrsg., 2016, Salzburger Raumordnungsbericht 2011-2014, 7, Bericht über den Stand der Raumordnung im Land Salzburg, Überarbeitete und ergänzte Auflage, Salzburg, 438 S.
- ASL, 2018, Amt der Salzburger Landesregierung, Hrsg., 2018, Bausteine für ein neues Landesentwicklungsprogramm (gemäß ROG-Novelle 2017), Ein Lebensraum mit Zukunft, Vorschlag des LEP-Kernteams vom 28, Mai 2018, Salzburg: unveröff. Bericht. 456 S.
- BORN, G., HABENICHT, G., 2014, Grünkorridore im Regionalprogramm Pinzgau und Oberpinzgau, in: Raumplanung aktuell, Die Zeitschrift für die Salzburger Raumentwicklung, S. 65-66
- GRUBER, M., KANONIER, A., POHN-WEIDINGER, S., SCHINDELEGGER, A., 2018, Spatial Planning in Austria with References to Spatial Development and Regional Policy, Wien: (= ÖROK-Schriftenreihe, n° 202), 165 S.
- KÖHLER, C., GRILLMAYER, R., VÖLK, F., 2005, Habitatvernetzung in Österreich, Expertenbasierte GIS-Modellierung von Mobilitäts-Widerstandswerten für waldbevorzugende, wildlebende Großsäuger, Institut für Vermessung, Fernerkundung und Landinformation, Universität für Bodenkultur, Wien.
- LEITNER, H., ENGELBERGER, I., SIGNER, J., 2012, Lebensraumvernetzung Pinzgau. Studie im Auftrag der Salzburger Landesregierung, Salzburger Jägerschaft und Regionalplanung Pinzgau, Klagenfurt, 30 S.
- LEITNER, H., GRILLMAYER, R., LEISSING, D. *et al.*, 2016, Lebensraumvernetzung Österreich, Grundlagen Aktionsfelder Zusammenarbeit, Wien: (= Umweltbundesamt), 90 S.
- LEP, 2003, Salzburger Landesentwicklungsprogramm, Gesamtüberarbeitung 2003, Salzburg (= Entwicklungsprogramme und Konzepte, H. 3), 258 S.
- REGIONALPROGRAMM OBERPINZGAU, 2013, Regionalprogramm RV Oberpinzgau, Ziele, Maßnahmen und Empfehlung. Endbericht, Beschlussfassung Stand: 12.07.2013, verbindlich erklärt durch Verordnung der Salzburger Landesregierung vom 21, Februar 2014, LGBl, n° 19/2014,
- tttps://www.salzburg.gv.at/bauenwohnen_/Documents/20130712_repro_rvoberpinzgau_zielema_nempf_endbericht_siegel.pdf
- VORHABENSBERICHT, 2013, Landesentwicklungsprogramm, Gesamtüberarbeitung, Vorhabensbericht, Salzburg: unveröff. Bericht, 20 Seiten.