



Kate Kelly <katekelly01@gmail.com>

Help with wildlife corridor/development review

Wood, Andrew <Andrew.Wood@vermont.gov>

Fri, Jul 15, 2022 at 10:42 AM

To: katekelly01 <katekelly01@gmail.com>

Cc: "Hilke, Jens" <Jens.Hilke@vermont.gov>, "Dodge, Noel" <Noel.Dodge@vermont.gov>

Kate,

While I am happy to provide biology/ecology information, I want to be clear that this, and my previous response, isn't a formal review of the project, as I don't believe we have jurisdiction in the matter. If a project were to come through Act 250, Section 248, or another state permit, that would be a different matter and the Department would review it according to our standard practices for the applicable permits. I also haven't been on site, which limits my ability to interpret what's happening on the ground. Thanks for understanding the limitations of this response.

Width is actually a nuanced factor of corridor design. One way that I describe it is that corridors have (at least) 3 dimensions: Length, Width, Habitat Quality. And then of course it depends on what species you are designing for. A corridor designed with dimensions optimal for species X may not work very well for species Y. Scale is also important. 100 feet to a salamander is very different than 100 feet to a large mammal. So it becomes very difficult to make generalizations about corridor effectiveness, especially when it hasn't been carefully designed to meet a specific biological goal.

That said, research indicates that wider corridors are more likely to function for a broad suite of species. This is mainly because the wider the corridor is, the less edge effects will dominate the corridor space. A long, skinny corridor surrounded by development probably presents more of a challenge for multiple species to navigate.

When it comes to that third dimension – habitat quality – it matters a great deal what the topography, vegetation, and surrounding human uses are. In other words, no matter what width and length corridor you get, it's important to ensure that the corridor is managed as best as possible: protected from light/noise pollution, disturbance, encroachment, invasive species, domestic pets, etc. This would be especially important on the lots that border the corridor. Also would be important to maintain habitat/vegetative quality at the road crossing where Observatory Road and North Road meet. Again – trying to keep corridor quality as good as possible where the corridor meets the roads. It doesn't appear that there are any culverts along that section, so crossing would need to happen overland

Finally, its important to consider what's on either end of the corridor. What are the long-term prospects of habitat protection? If the next development severs the corridor, it might undermine all the planning work done at this site. So I think it's a good idea like you mentioned to have those conversations at the town level as to what the long-term strategy is for habitat protection in the different areas of Hinesburg.

If you go the route of hiring a consultant to consider wildlife corridors, I would suggest thinking broader about assessing multiple corridor areas, rather than putting all the eggs in this one basket.

Regarding your question about zoning and planning, you might also check out the VNRC publication *Community Strategies for Vermont's Forests and Wildlife* ([VNRC-Forestland-Conservation-10-1-links.pdf](#)). Lots of good info in there so that you don't need to reinvent the wheel. Jens is also still a great resource for planning (I've left the Community Wildlife Program).

Hope you are doing well, and thanks for reaching out.

Andy

Andy Wood | Habitat Protection Scientist (He/Him)

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From: Kate Kelly <katekelly01@gmail.com>
Sent: Friday, July 8, 2022 9:53 AM
To: Wood, Andrew <Andrew.Wood@vermont.gov>
Subject: Help with wildlife corridor/development review

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Hi Andy,

I sent the email below to Jens, who mentioned that he doesn't do development review but would forward to you. We have since received an updated plan from the developer, which I attach here. The main question is if the 100-foot width corridor as they propose is adequate to provide wildlife passage from one core wildlife area to another. Can you provide feedback on this, or should we (Hinesburg Conservation Commission) recommend to the DRB that we hire a wildlife consultant to provide recommendations on width and location.

We are looking for guidance related to the implementation of Act 171 and a specific development proposal. We have the corridor itself mapped on the Town map, but the area it links is what will be affected by the proposed development. How do we best determine and provide guidance to the applicant about wildlife passage width through the subject property, given their plans to retain some greenspace and conflicting intention to develop between the mapped corridor and that greenspace. Could they work directly with you? Do you do site visits? I am attaching the map they provided in their application, along with one made by Town staff that shows the red lot lines and the corridor shading.

On a similar note, we are attempting to revise regulations for our RR1 district (which incidentally, the above development falls in). We are making a case to the Planning Commission that the more rural and forested parts of this district deserve stronger protections for core wildlife habitat. I am wondering if you & Andy have a quick one- or two-pager that is already developed, that could be used to present the PC the importance of protecting forest blocks (e.g. what wildlife species require these large uninterrupted blocks, what sort of services they provide, and how fragmenting them with roads/driveways causes problems (and what these are).) I don't want to reinvent the wheel if there is already a pre-made document out there that is easy to understand for the lay person/Planning Commissioner. I think many of them hear "wildlife" and think "deer", then don't understand why putting in a few houses would be a problem.

Thanks so much Andy!

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