Study: Some forest roads bad for wildlife

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A U.S. study suggests forest roads used for such activities as logging or mineral removal can negatively affect wildlife for long periods of time.

"The problem we revealed points to a potential failure of forest managers and policy makers to realize the effect of roads reaches well beyond their boundaries and that abandonment or the decommissioning of roads does not mean detrimental ecological effects disappear," said University of Missouri-Columbia biology Professor Ray Semlitsch, who led the research.

The study monitored salamander populations in the southern Appalachian Mountain region in North Carolina. Investigators found salamander populations were affected for approximately 115 feet on both sides of both current and abandoned, relatively narrow, low-use roads.

"Extraction of timber 80 years ago has created a significant ecological 'footprint' ... that supersedes regeneration of the forest itself," said Semlitsch. "Assuming current timber management practices harvest trees at intervals of 80 to 100 years, footprints of logging roads from past harvests will not be gone before a new footprint is laid down, and effects will accumulate over time, eventually fragmenting forests into ever-smaller patches of suitable habitat."

The research has been accepted for publication in the journal Conservation Biology.