## Summer of CHANJ Wraps Up 💢 Safeguarding Spaces



## Actions to preserve and restore connectivity for NJ's wildlife

We stretched it as far as we could, but it's time to accept the turn of season and close out the Summer of CHANJ. In case you've had your head in the sand (wink), you can get caught up on this campaign by checking out our <a href="CHANJ website">CHANJ website</a> or <a href="news release">news release</a>. But as we 'wrap,' we want to re-state a few actions, big and small, that can be taken to help protect habitat connectivity for New Jersey's wildlife...

**Preserving CHANJ Parcels:** Permanently protecting habitat through land acquisition or easement is essential to securing connectivity for wildlife. The <a href="CHANJ mapping">CHANJ mapping</a> shows which parcels intersect CHANJ Cores and Corridors, to help focus land preservation efforts on these important areas. We're working with NJDEP's Green Acres program, various land trusts and our own Wildlife Management Area planners to incorporate the CHANJ layers into their acquisition priorities.

"No parcel left behind!" Even small properties can be key pieces within wildlife corridors and can help to string together larger areas of natural land. Bonus points for preserving roadside parcels next to a <u>wildlife passage project</u>, where investments have already been made to help wildlife cross safely under roadways.



This snippet from the CHANJ Mapping shows a completed wildlife passage project (blue circle) within a CHANJ Corridor (tan/brown). This corridor contains almost no preserved land (yellow), which makes it vulnerable to being fragmented by future development. Land preservation is especially needed in habitat corridors to ensure that animals will continue to have suitable pathways to move through the landscape.

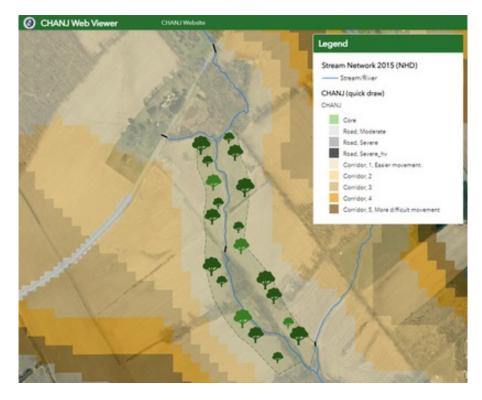
Culvert Ops: Can you say "North Atlantic Aquatic Connectivity Collaborative"

three times in a row? Neither can we, but we know the NAACC culvert inventories provide valuable insight into how passable our bridges and culverts are to fish and wildlife. More than 700 stream crossing structures have been assessed across New Jersey, and you can view them from the CHANJ Web Viewer. The NAACC ratings (ranging from "no barrier" to "severe barrier") can help guide actions at the local level by showing which structures could use a connectivity upgrade, like perhaps a widening the next time the structure is due for replacement. Chapter 4 of our CHANJ Guidance Document has helpful information on how to design and construct effective wildlife passage systems. Or, if a structure already shows up as a blue dot in the NAACC layer (a "no barrier" or "insignificant barrier" rating), this may be a great place to simply protect natural land on both sides!



A "gold star" for connectivity: Here, a stream crossing culvert rated as an "insignificant barrier" to wildlife (blue dot) has preserved land (yellow) on both sides of the road and through the CHANJ-mapped Cores and Corridors (green and tan/brown, respectively).

**Restoring CHANJ Parcels:** Existing protected lands, farmlands, unused portions of recreational properties and large-scale lawns are all examples of places in your community where a bit of habitat restoration can benefit connectivity - especially within CHANJ-mapped areas. Riparian zones around streams and rivers are critical for wildlife movement, so creating wider natural buffers with native trees or other plantings is one action with big benefits. Funding and incentives may be available through your local watershed association or USDA office.



An example of a stream (blue line) through a CHANJ corridor (tan/brown) where expanding the vegetated buffer would improve move-through habitat for wildlife – while also benefitting water quality and reducing flooding and erosion.

We hope you've enjoyed the Summer of CHANJ and are trying out our tools! Remember, the <a href="CHANJ website">CHANJ website</a> is our one-stop-shop for all things 'CHANJ,' where you can find a short promo video, the Mapping and Guidance Document, a CHANJ Mapping Tutorial video, featured projects and partners, and lots more pro-connectivity information from across NJ and the Northeast.

## **CHANJ Featured Species – Part III**

## Spotted salamanders

(Ambystoma maculatum) are secretive animals they're one of five "mole salamander" species in New Jersey that spend most of lives their small in rodent burrows



beneath the forest floor. They come to the surface when it's damp & dark out to feed on invertebrates like earthworms, slugs, and centipedes. Their BIG showing on land happens just once a year, at the end of winter, when the

ground has thawed and the first warm nighttime rains trigger a mass migration to their vernal breeding pools.

It's the same trek their kind have made for centuries; a round-trip journey of about a half mile, typically. But the modern twist is that now, many spotted salamanders have roads to cross in order to reach the water (and cross again to return upland). Amphibians don't fare so well against traffic: We know that just 15 vehicles per hour can kill more than half of all amphibians that try to cross a road, and for spotted salamanders, any more than 10% annual road mortality can lead to local extinction. Spotted salamanders will soon have "Special Concern" status in NJ due to habitat loss and road impacts.

For many years NJDEP Fish & Wildlife's Endangered and Nongame Species Program - along with the Conserve Wildlife Foundation, Sourland Conservancy and local environmental commissions - have been documenting amphibian crossing hotspots and taking action to reduce roadkill. More recently our Connecting Habitat Across New Jersey (CHANJ) team has been working with transportation agencies and engineers to figure out long-term solutions, like installing tunnels below roads at the most vulnerable and important crossing spots. Our first amphibian-specific road passage system will be constructed in 2025 and will include 4 underpass tunnels plus special fencing to guide the animals into them. It's a long-awaited project...prepare for exciting pictures to come!

- Learn more about CHANJ
- Sign up for the CHANJ email list
- <u>Report wildlife sightings</u> to NJDEP Fish & Wildlife













