

Innsbrook Fishing Club Electroshock Survey Results



**Prepared By
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This electroshock survey was arranged and paid for by the Innsbrook Fishing Club to understand the current conditions of various lakes within Innsbrook Resort. These surveys have been conducted approximately every two years.

Lake Aspen (150 acres)

- Majority of bass population is 11-13" with 95% relative weights.
- Protect all bass over 14".
- Remove 40 bass per acre this year for the rest of the bass to grow a bit larger.
- Stock 1 Tiger Muskie per acre per year to help naturally keep the bass population in check (they don't bother swimmers). Allow harvest of Tiger Muskie over 38".
- In the fall, stock 5 bass 12-14" per acre from a hatchery (these will be 1.5 yr old bass and will turn into 3-5 pounders quickly). Currently the bass being born into this lake are taking 5-6 years to reach 12-14" long... and they don't have enough life left to grow much larger.



St Gallen (32 Acres)

- Majority of bass population is 9-12" with 85% relative weights.
- Stock 1 Tiger Muskie per acre each year.
- Stock 1000 crappie every year.
- If funds allow stock 50 adult bluegill and 5 hatchery bass 12-14" per acre every year.

Tyrol (7 Acres)

- About 8 years old.
- First generation bass grew to 2-4 pounds, but they are gone... 2nd and 3rd generation bass only grew to 10-12" long and are done growing.
- The reason is that bluegill never got established. Most of the panfish are redear sunfish and they don't reproduce enough to feed bass effectively. Bluegill spawn every month all summer long and the new bluegill fry each month feed baby bass all summer long. Redear only spawn once.
- Stock 300 adult bluegill per acre per year for the next 3 years.
- Remove 60 bass per acre each year for 3 years.
- Stock 10 hatchery bass per acre 12-14" long fall 2024.



Friedan (5 acres)

- Smallmouth lake
- 4 years old.
- Largemouth Bass and regular Bluegill have unfortunately been introduced to this lake. This creates a situation where they out compete the smallmouth for spawning and recruitment of smallmouth bass will discontinue naturally.
- There is great forage in this lake currently and the smallmouth and largemouth that are there will grow very large over the next 3 years before they deplete the forage.
- Stock 400 smallmouth each year for the next two years and then 100 per year after that.
- You can decide if you want to continue to remove largemouth bass when caught or leave the big ones in since they are and will be 3-5 lbs. each.
- Always remove the largemouth under 14", but your choice to leave the big ones in.



Scheffborg (12 acres)

- Nice balance of fish.
- Keep an eye on the crappie population as they appear to be recently introduced or reintroduced and may need to be harvested to keep in check.
- Remove 30 bass per acre under 14".
- Sometime in the next 3-4 years introduce 50 hatchery bass 12-14" long to improve the gene pool.
- Has a naturally reproducing golden shiner population of all sizes.
- Stock 100 pounds of shiners every spring and again every fall into this lake to enhance this amazing forage in the lake.



Lucerne Lake (40 acres)

- Keep taking small bass out... it's working! Good job!
- Nice relative weights and 12-14" average sizes for the bass... But there are still too many bass in this lake.

Innsbrook Lake (55 acres)

- This lake has an abundance of White Crappies, and they need to be removed! They are edible sizes but barely... don't transplant these crappies to other lakes.
- Most of the crappies in your other lakes are black crappie.
- Black crappies are great to have in small lakes and ponds (> 5 acres) but white crappies are not since they are large reservoir crappie.
- Focus on harvesting every crappie caught from this lake for 3 years straight. A big harvest effort would be extremely beneficial.
- As for fish stocking, you could stock 20 hybrid striped bass (HSB) per acre into this lake in May-August. Don't stock HSB during cool water months as they don't regrow scales or heal up in cooler water. They develop fungal and bacterial infections and die 1-2 months after stocking in cool water. They would be great fish to help with future white crappie populations and help keep them from stunting out.



Wanderfern (52 acres)

- Walleye stocking experiments have gone great, and this still feels like the best lake to continue stocking walleyes.
- However, recommend stocking 15 walleye per acre every year into this lake.
- This will build a catchable population over time!
- You will lose about 20% of your walleye down the overflow (into Alpine); lose about 20% to predation from Bass; and lose about 20% to angling harvest and mishandling.
- Your current population and stocking of 5 fish per acre is probably more like 2 fish per acre. For the three years of stocking, you probably have a viable population of around 300 walleyes in the lake.



Linden Lake (15 acres)

- Has some nice bass, but still to many small ones.
- The problem with small bass overpopulation: too many small bass eat up the bluegill fry before it gets a chance to become a substantial meal.
- Bass have plenty to eat for about 3 months per year, but not enough to eat for the other 9 months of the year.
- Removing as many bass under 14" as possible you can help free up forage for the rest of the bass so they can eat and grow for the rest of the year.
- An ideal situation is for your lake to have 12 months' worth of forage for your bass to keep growing!
- **Due to your lack of rooted aquatic vegetation and shoreline habitat/cover it's even more important to remove small bass every year from most of your lakes. (General comment for all lakes across Innsbrook)**
- Stocking 15 Tiger Muskie per year will naturally reduce the small bass population. The lake below will get some of these Muskies as well through the overflow.
- You can stock 100 adult bluegill per acre into this lake every year.

Kitzbuhl (19 Acres)

- I don't feel we got a great read on this population of fish.
- Due to the clear water; hot sun; and late afternoon time frame, the fish were not on the sunny side or shady side of the lake. I still have question marks into what exactly this fish population consists of today.
- We did collect 15-20 skinny bass 10-12" but not nearly as many as the other lakes.
- Overall, we didn't see or collect nearly as many fish of all species as the other lakes.
- Even with the surprisingly low number of fish on the shorelines and based on some conversations about this lake, my feeling is this is a better than average fishery compared to the other lakes. This is just a feeling and not based on data collected.
- Stock 10 hatchery bass per acre 12-14" long fall 2024.



Alpine (236 acres)

- While we did not survey this lake this trip, it remains a remarkable gem for Innsbrook. The water is clean, clear and should support larger and more numbers of fish.
- With an ambitious stocking plan and committed financial support, you will be sitting on the gem of the country. There wouldn't be a comparable lake anywhere in the US or the world really.
- Stocking Plan, Every Year for 5 years:
 - 300 lbs small trout 3-4" (\$12 per lb) (\$3,600 / year)
 - 500 lbs rainbows 9-12" (\$8 per lb) (\$4,000 / year)
 - 2000 lbs feed trained bass 1-3 lbs (\$10.25 per lb) (\$20,500 / year)
 - 1000 lbs bluegill 5-9" (\$10.25 per lb) (\$10,250 / year)
 - 2000 crappie 4-6" - \$1.50 each (\$3,000 / year)
 - 1000 smallmouth - \$5 each (\$5,000 / year)
 - Annual Cost \$46,350 to \$50,000.
- Your use of feeders and the feeding program will support these stocking rates to create an incredible fishery.
- In addition, the 15 walleye per acre into Wanderfern Lake above will add another prize fish species.

