



U.S. DEPARTMENT OF DEFENSE, AIR FORCE – TYNDALL AIR FORCE BASE

Tyndall Air Force Base (Tyndall) is located 12 miles east of Panama City, Florida and encompasses over 28,000 acres that are largely undeveloped and protected. Since 2008, F4 Tech has provided a wide range of natural resources management planning, technology support, and ecosystem restoration services at Tyndall. Over the course of this long-term relationship, F4 Tech has adapted to ever-changing conditions and modified service offerings to meet client needs. Specific F4 Tech services have included GIS stand mapping, forest inventory, forest planning, timber sale administration, habitat restoration, site preparation, tree planting, and natural disaster response. In addition, SilvAssist (F4 Tech's technology suite), has been consistently utilized to help manage workflows and implement field data collection, reporting, project tracking, and data analysis.



Prior to Hurricane Michael, F4 Tech quantified forest resources and implemented upland ecosystem restoration activities involving the conversion of off-site stands of planted slash pine to longleaf pine forest communities. This effort included harvesting approximately half of the trees (approximately 30-35 years old) using a client-derived, row thinning approach that varied the number of cut/leave rows. This approach appeared to yield positive results regarding the timing of prescribed burns and understory plant responses – two important integrated natural resources management goals at Tyndall.

Hurricane Michael made landfall near Tyndall on October 10th, 2018 as a Category 5 Hurricane. Tyndall was among the hardest hit areas with catastrophic impacts to base housing, utilities, infrastructure, and an estimated 90% of the pine forest that previously dominated much of the base. Since late 2018, F4 Tech has coordinated and managed extensive timber salvage operations, site preparation, and forest restoration focused on planting longleaf pine seedlings. We have also worked on a ground cover restoration project intended to produce a consistent fuel source for frequent prescribed fires. Ground cover re-establishment will help facilitate restoration and maintenance of the longleaf pine/wiregrass ecosystem and provide additional benefits such as improved habitat and food sources threatened & endangered wildlife including gopher tortoises and eastern indigo snakes, as well as many game species.



PROJECT HIGHLIGHTS

Pre-Hurricane Michael (2008-2018)

- Mapped and inventoried all forest resources across 20,000 acres.
- Re-established longleaf pine across 2,338 acres.

Post Hurricane Michael (October 2018-present)

- Coordinated and managed the clearing of massive quantities of woody debris (snags and downed trees) on nearly 9,500 acres.
- Site prepared and planted longleaf pine on + 3,750 acres.
- Supported a groundcover restoration project on 60-80 acres: site preparation to facilitate direct seeding using a "Grasslander", seed acquisition, cleaning, storage, and planting.

