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This is an inventory of herbarium samples cross referenced to the New Hampshire Natural Heritage Bureau's "New Hampshire County Plant Checklist" focusing on extirpated and historically present species. The purpose in generating the inventory was to identify which specimens in the herbarium represent local, national, and globally extinct species. This inventory allows the herbarium to potentially assess the value and rarity of the rare and endangered species in our collection to inform scientific research, understand the region's historical botanical heritage, and identify potentially under-sampled regions of the state.

This project culminated in a simple but well-designed spreadsheet. The searchable inventories highlight all expanded fields for ease of data exploration, and the spreadsheet contains multiple sheets highlighting a selection of the findings as examples of how the data can be used. One potential avenue of use may lie with the New Hampshire Fish & Game Department's process for the 10-year revision of the state's Wildlife Action Plan (WAP), to be completed by 2025. As part of this revision, plant species will be included in the plan as Species of Greatest Conservation Need (SGCN), and this inventory may be of use in this process.

The goal for this project was to produce something data rich, easy to use, and searchable. The spreadsheet developed for the project opens to a searchable inventory of all herbaria samples of species listed as extirpated (i.e, locally extinct) in accordance with the New Hampshire Natural Heritage Bureau's "New Hampshire County Plant Checklist". The title of the first sheet, "SX", corresponds to the designation used for extirpated species in the aforementioned checklist. Database records of the samples held by the Albion R. Hodgdon Herbarium were sourced from the Consortium of Northeast Herbaria. Samples in the inventory are listed by species name, checklist designation for threatened status (ie. "SX" for extirpated or "SH" for historically present) and known occurrences before and after the year 2000. Herbarium records are grouped by species heading with a selection of record data made available when expanded. All expanded sections are searchable for most data fields and will highlight all records containing the search term in yellow. Species listings highlighted by a red fill indicate no samples for that species held by the Albion R. Hodgdon Herbarium. This short list of species served as the model from which the much more extensive list of historically present species on the second sheet, titled "SH", was also developed employing the same format, designations, and searchable fields. The historically present species portion of the project is of particular interest in that it represents species for which their status as extant or extirpated is currently somewhere in process as there have been no verified observances within the state, and its status as being fully extirpated has not been confirmed.

The sheets that follow the inventory sheets are examples of data that can be generated from the inventory starting with SX Data by State and ending with a list of species for which all herbaria records found represented out-of-state samples only. The example data sheets that follow the inventory only scratch the surface of what this data has the potential to reveal, and begs questions such as 'Why do Merrimack, Sullivan, Belknap, and Cheshire counties seem significantly under-sampled compared to the rest of New Hampshire in regard to these species?'. Exploring this, and many other questions like it, may become the work of future students, staff, and citizen scientists working with the Albion R. Hodgdon Herbarium in pursuit of informing policy changes like those of the New Hampshire Fish & Game Department's process for revising the state's Wildlife Action Plan. *Brachyelytrum erectum* stands out immediately as worthy of further investigation. The species has known occurrences documented after the year 2000, and herbarium records indicate the species has been found in Grafton, Belknap, and Strafford counties. A survey of those counties and surrounding counties along easily accessible powerline corridors, and other accessible documented habitats, should either confirm its presence within the landscape of the state and give us a working estimate of its population and distribution, or take us a step closer to asserting its extirpation from the state.

Citizen scientists might be employed to identify *Viburnum edule* populations as they hike the White Mountains of New Hampshire, particularly within Coos county. The records held for this species indicate it was historically present in the vicinity of Tuckerman's Ravine, Huntington's Ravine, and Oakes Gulf on Mount Washington. Surveys of areas indicated by herbaria records and similar areas of the mountain range may yield literal edible fruits for those looking to confirm this species presence in New Hampshire. Records document the species present as recently as 1978 when last sampled in Coos county by Irene M. Storks.

These are only a few examples of directions in which this inventory may take research for the Albion R. Hodgdon Herbarium and other research groups looking to employ this information to better understand the current and historic state of New Hamphsire's ecosystems and local botany. Confirming the local extinction or continued survival of these historically present species could assist researchers in a variety of ways, including improving our understanding of changes in the biodiversity of the region and the development of policies better designed to protect the state's biodiversity, heritage, and natural resources.