

President Stanley King
Amherst College
Amherst, Massachusetts

Dear Sir:

I submit the following report on the Amherst College Wild Life Sanctuary:

Purpose and Aims.

The purpose is twofold.

1. An outdoor laboratory for observational and experimental studies by the scientific departments of the College.
2. A park for the public.

The College is fortunate in having this tract immediately adjacent to the campus for scientific study. In most colleges the undergraduates would be obliged to travel much farther for such a purpose. The tract is sufficiently large to enable the development of various environmental aspects by controlled culling, and introduction of new plants. Your director has aimed at naturalness rather than the acquisition of varieties or the formality of an arboretum. The major cover plantings have been Red Pine, which is a vigorous growing species and much less susceptible to the attacks of insects or fungal diseases. There are some areas of dominance:

- a. The Coniferetum: spruces, balsams and pines.
- b. Pitch Pine area: distinctly Cape Cod aspect.
- c. Old Field Birch Groves.
- d. Oak-Maple Grove - near tool houses.
- e. Swamp Oaks-Red Maple - near South East Street.
- f. Tyler Pool - east of high tension area.

Its two and one-half acre area is sufficiently large to present the shaded and brilliantly illuminated areas which are so essential to biological studies of aquatic life. In addition, your director recommends the construction of a rocky margin and a sand-spit for further developmental and observational studies.

- g. Dr. Emerson has recommended the enclosure of an area as a vivarium where the habits of certain forms of animal life may be observed. I heartily approve and am awaiting definite plans.

- h. The herb garden for medicinal plants and savory herbs could be enlarged and made an educational asset.
- i. Wild life cover. Your director believes in maintaining an adequate cover for birds and small animals in a natural setting, left as undisturbed as possible.
- j. Your director believes that the zoologists can make in the future a still more abundant use of the whole project.
- k. In addition to the foregoing uses of the Sanctuary, permission has been given to the science department of the Amherst High School to use the Sanctuary for observational work and study; to the Massachusetts State College for similar use; to officials of the State for experiments and observations of Tyler Pool for temperatures and fresh water fish production; to the local sportsmen for the release of pheasants and other game birds.
- l. As a sanctuary for bird life its value is recognized and appreciated by the local sportsmen. Such trouble as occurs is caused by people from outside of Amherst.

2. A park for the people.

For the college body, in particular, and also the citizens of Amherst, as a whole, the proximity of the Wild Life Sanctuary to the campus and its nearness to two main arteries is very advantageous. And I am glad to say both the college and the public, in general, appreciate the project.

In the Tuckerman Lot (along South Pleasant Street) your director has had two objects in mind in the development:

1. To screen the unattractive right-of-way of the Boston and Maine Railroad by the planting of evergreens.
2. To maintain the uninterrupted view of the Holyoke Range.

From Sunset Hill both west and north the view is beautiful and striking. It should be kept so. During the past summer certain trees which deflected or interrupted this view were removed. The Tuckerman Trail as it swings northward from Sunset Hill offers good views of Mt. Toby to the north, and the Pelham Hills, dominated by Mt. Lincoln to the east. It then swings through the Yellow or Pitch Pine area. This is decidedly a Cape Cod aspect. It should be preserved. North of the tool houses an excellent view of the campus dominates.

Crossing the Central Vermont is the older part of the Sanctuary, with its herb plot, groves of Red Pine, the Coniferetum, Tyler Pool, and an older and denser growth paralleling South East Street.

An adequate graded trail system has been developed. To enhance the beauty of the trails and to safeguard from fire these trails are kept wide, and natural flowering shrubs are developed for coloration of flowers and fruits which serve as food for the birdlife.

Your director regrets that, due to persistent vandalism, it is impossible, with the policing obtainable, to continue the labeling of vegetation in accordance with the educational scheme he thoroughly favors, but the public is the loser.

For the safety of the public, the carrying and use of firearms are prohibited. For the protection of the animal life, dogs not under the control of a leash are not tolerated. Horse-back riding is also forbidden. For the safety of the forest, the building of fires is banned.

Athletic Uses of the Sanctuary

Your director had no hesitation in granting the use of the paths by the cross-country teams or of Tyler Pool as a skating rink. For reasons of public safety Tyler Pool should not be employed as a swimming pool. Your director is firmly convinced of the desirability of keeping the Sanctuary set apart for the use of the science departments of the College and under their control.

Trails and Paths.

The system of trails and paths is designed to commemorate botanists connected with the College. There is one trail which, roughly speaking, traverses the circumference of the Sanctuary. It is known as

The Tuckerman Trail, named after Edward Tuckerman,

Son of Edward and Sophia (May), born Boston, Mass., Dec. 7, 1817. B.A. Union 1837, Harvard 1847, LL.B. Harvard Law School, 1839, M.A. Union 1842, LL.D. Amherst 1875; Phi Beta Kappa; Lecturer in History, Amherst, 1854-58; Professor of Botany, Amherst, 1858-86; distinguished Lichenologist; among his publications, A Catalogue of Plants Growing Within Thirty Miles of Amherst (with Charles C. Frost), 1875. Died Amherst, Mass., March 15, 1886.

Tuckerman Ravine and Tuckerman Trail on Mt. Washington are named after him.

The paths are known as

- a. The Chapman Path, named after A. W. Chapman, Class of 1830, extends through the Red Pine grove east of the Central Vermont and links the northside and southside Tuckerman Trails.

Chapman, Alvan Wentworth, son of Paul and Ruth (Pomeroy), born Southampton, Mass., Sept. 28, 1809. M.D. Louisville, Ky., Med. Coll., 1846; LL.D. Univ. of N. C., 1886.

Prepared with Rev. Vinson Gould, Southampton, and Prof. Bela B. Edwards (A. C. 1824), Andover. Studied medicine Savannah and Washington, Ga., and Quincy, Fla., 1830-36; practiced Quincy and Jackson Co., Fla., 1836-46; Apalachicola, Fla., 1846-80; planter Gadsden Co., Fla., 1840-43. Collector

of Internal Revenue, Apalachicola, Fla., 1865; Collector of Customs there, 1866-69. Author Flora of the Southern U. S. Died Apalachicola, Fla., April 6, 1899.

- b. The Morong Path, named after Thomas Morong, Class of 1848, is a link path from the Chapman Path to the northside Tuckerman Trail.

Morong, Thomas, son of Thomas and Jane C. (Travers), born Cahawba, Ala., April 15, 1827. M.A. Amherst 1851. Psi Upsilon. Prepared Warren Academy; studied law with G. W. Warren, Charlestown and Harvard Law School, 1849-50; Andover Theological Seminary, 1850-53; ordained Pepperell, April 12, 1854; pastor there, 1854-55; Iowa City, Iowa, 1856-58; stated supply Webster, 1859; Globe Village (Southbridge), 1860-63; pastor there 1864-67; South Church, Ipswich, 1868-75; stated supply Ashland, 1875-78; pastor there, 1878-88; collected botanical specimens, Paraguay and Chili, 1888-90; curator of Herbarium of Columbia Coll., 1890; lecturer on botany Barnard, Brooklyn, N. Y., Institute and summer school, Cold Springs, L. I.; did botanical work for Columbia Coll. in Ga., 1893-94. Member Amer. Assoc. for Advancement of Science. Pub. catalogue of So. American plants, many articles on botanical subjects, and sermons, pamphlets and tracts. Died Boston, April 26, 1894.

- c. The Goodale Path, named after A. S. Goodale, Class of 1898, is a link from the southside Tuckerman Trail, extending along the dam impounding Tyler Pool to the northside Tuckerman Trail.

Goodale, Alfred Shepard, son of Charles Lyman and Mary Hyde (Shepard), born South Amherst, Mass., May 8, 1876. Phi Beta Kappa. Prepared Amherst High School; studied entomology Mass. Agricultural College (now Mass. State College) 1898-99; assistant to Registrar Amherst 1900-01; Acting Registrar 1901-02; Registrar 1902-18; also instructor in botany 1904-12; assistant professor of botany 1912-13; associate professor 1913-41; associate professor emeritus 1941-. Member Amer. Fern Society; Fellow Amer. Assoc. for Advancement of Science. Clubs: New England Botanical; Torrey Botanical. Author: Check-list of Pteridophyta of the Connecticut River Watershed in Massachusetts 1932; Check-list of the Gymnospermae of the Connecticut River Watershed in Massachusetts 1935 (pamphlets).

- d. The Morris Path, named after Edward L. Morris, Class of 1891, is the easternmost link between northside and southside Tuckerman Trails.

Morris, Edward Lyman, son of Edward F and Louise J. (Clapp), born Monson, Mass., Oct. 23, 1870. M.A. Amherst 1895; Chi Phi. Prepared Monson Academy; studied Museum of Worcester Nat. Hist. Society 1891-92; graduate student Harvard 1892-93; assistant in biology lab. Amherst 1893-95; instructor in biology 1895-96; teacher of biology, chemistry and botany Washington, D. C. High School 1896-98; director in botany 1898-1900; head of biology dept. 1900-07; curator Brooklyn Inst. of Arts and Sciences 1907-13. Assoc. editor School Science; assoc. examiner College Entrance Exam Board; editor of the Torrey Botanical Club;

special plant expert of Department of Agriculture; secretary of Nomenclature Commission of Section G American Association for Advancement of Science, fellow 1911-13. Wrote many scientific articles. Died Brooklyn, N. Y. September 14, 1913.

Student Labor.

In the developmental stage of the Sanctuary, under the direct supervision of Mr. Walter C. Markert, undergraduates did the very valuable laborious grading of approximately four miles of paths and trails; construction of the dam for the pool in the Tuckerman Lot; the building of the long dam which impounds Tyler Pool. In addition they cleared away much undesirable undershrubs and planted the larger part of the introduced trees. This labor by the undergraduates was toilsome and valuable.

In the future the use of undergraduates, if properly supervised, can be of similar value. They can be employed for policing against vandalism, clearing small growth, piling brush, grading and repairing trails, and mowing along paths.

Your director is thoroughly convinced of the value of the past work done by undergraduates and endorses the principle of their further use if properly supervised.

The Director.

The present incumbent is fast approaching a point of time at which for physical reasons he will be obliged to relinquish his active supervision. In the formative and developmental period of the Sanctuary Mr. Walter C. Markert was under your director's close supervision when the construction of trails, the building of dams, the planting of trees, and the digging of the drainage ditches occurred. When Mr. Markert was transferred to the Grounds Department, the Sanctuary was the loser. This has been notably true in respect to the procuring of necessary labor. The customary procedure in the Buildings and Grounds Department has been, in case of a temporary shortage of labor in any of the crews, to draw from the grounds force. Your director would not, on the one hand, be so presumptuous as to offer any comment on this procedure so far as Buildings and Grounds are concerned; he feels strongly, however, that he would be remiss in his duty to the Sanctuary if he failed to state that this practice has been a grave misfortune to the Sanctuary.

In the development of the Sanctuary, your director found Mr. Markert very able, cooperative and skillful. Your director indicated broad plans, it is true. To Mr. Markert fell the immediate supervision of undergraduate laborers, the hard work of execution, the ultimate drudgery of planting, and the artistic winding of the trails. Due to Mr. Markert's foresight Red Pines were planted between the tool shed and the Athletic Field. Your director during the past season has opened this area up with the resulting effect of tying the campus and the Sanctuary together as a whole. From the Sanctuary the campus with its two foci -- Johnson Chapel and Stearns Church -- dominate. From the campus the Sanctuary ties in. Your director takes no credit to himself for this landscaping. Mr. Markert did this, and to him belongs the credit.

Your director wishes to express to you his deep gratitude for the opportunity to develop the Sanctuary from an old pasture. He has had definite ideas and you have allowed him to carry them out. He appreciates your confidence in him. He hopes that his work will stand the test of time.

As the time draws near when your director must relinquish this work he makes the following suggestions for your consideration in defining the duties and responsibilities of his successor.

Duties and Responsibilities of the Director of the Wild Life Sanctuary.

1. Inasmuch as this is a scientific project, the director should conduct his department in coordination with the desires of the scientific group -- especially the biological -- of the faculty.
2. The director should in no way be linked in with the Buildings and Grounds Department of the College. His budget should be directly under the control of the President (or Treasurer) of the College. The director should be responsible for all expenditures and no bills for the Sanctuary should be incurred or paid without his approval. No director can do good work if he has to serve two masters, or is under divided authority.
3. The director should be granted full responsibility for hiring and dismissing all individuals in his employ. He should determine the wages paid to such employees.
4. All ordering of materials, supplies, tools, and trees should be under his control.
5. All plantings should be his responsibility.
6. He should have charge of the removal of undesirable trees; of tree care and surgery; of the disposal of wood and slash.
7. He should have a knowledge of the use of tools and tractor power.
8. He should be a practical naturalist with a good sound knowledge of forest preservation and the demands of game protection.
9. He should be responsible for the policing against vandalism.
10. He should be a college graduate, not too young nor too old.
11. It should be for him a full time appointment at an initial salary of \$2500. He should be able to look forward to the usual retirement provision, for his is really a lifetime position of development and maintenance.

I will, in a supplementary report, discuss the problem of vandalism and present a budget recommendation for 1946.

Respectfully submitted,

L A [Fred S. Goodale]
Director

January 15, 1946