HISTORY AND GOALS OF METRIA, THE **METROPOLITAN TREE IMPROVEMENT ALLIANCE 1**

by Henry D. Gerhold

Abstract. METRIA's origin, purpose, organization, activities, and future goals are described. Simply stated, it is an alliance of people who share a vision of working together to improve the quality of landscape trees grown in metropolitan regions.

This is an account of the beginnings and aspirations of METRIA, the Metropolitan Tree Improvement Alliance. The purpose is to introduce METRIA to those who may want to become members and join in its work. The word "alliance" is a key one, indicating that members share a strong commitment to an important cause. From the very beginning, the focus has been on developing improved urban trees and better information about them. Obviously, close collaboration among different kinds of people will be needed to achieve these ends. The required expertise and sense of responsibility have existed for some time, but have been fragmented among various public and private agencies, scientific disciplines, and professional organizations. METRIA evolved through the realization that nurserymen, municipal and highway arborists, landscape planners, tree breeders, and other specialists could and should work together more effectively, in many ways, toward developing better trees and better techniques for managing them.

Origin

METRIA was conceived, somewhat vaguely at first, at a meeting held at The Pennsylvania State University in December 1973. The idea arose from surveys of municipal arborists and landscape nurserymen that I and my colleagues conducted in 1972 and 1973 (Long et al. 1973, Gerhold et al. 1975, Gerhold and Steiner 1976). We found widespread concern among many people who realized that urban trees were in trouble and needed help. Support from the Pinchot Institute of the Northeastern Forest Experiment Station made it possible to invite a small group of researchers and practitioners who were selected for their practical or scientific knowledge of landscape trees - their production, selection, planting, care, and related research. These founders of METRIA, joined by a few others in subsequent meetings (Exhibit 1), wanted to transform latent concern into more concerted action that would stimulate improvement of metropolitan trees. At the first meeting current

Exhibit 1. Members who founded the Metropolitan Tree Improvement Alliance at meetings in December 1973, June 1974, and March 1975.

Affiliation John W. Andresen University of Toronto F. Raymond Brush American Association of Nurserymen William H. Collins American Garden Cole, Inc. Thomas S. Elias Cary Arboretum, N.Y. Botanical Garden William Flemer III Princeton Nurseries Henry D. Gerhold Pennsylvania State University Gilmore Plant & Bulb Company Thomas O. Gilmore Northeastern Area State & Private Forestry Stanley L. Krugman **U.S. Forest Service** Northeastern Forest Experiment Station Pennsylvania State University Holden Arboretum Edgar H. Palpant Pennsylvania State University F. Phillip Neumann City of Charlotte, North Carolina N.J. Federation of Shade Tree Commissions Robert S. Ross Pennsylvania Dept. of Transportation New York Dept. of Transportation Frank S. Santamour, Jr. U.S. National Arboretum U.S. Forest Service Pennsylvania State University A.M. Townsend Nursery Crops Research Laboratory, ARS Horace V. Wester Ecological Services Laboratory, NCP

¹ The U.S. National Arboretum, The Pennsylvania State University, and the Northeastern Forest Experiment Station through the Pinchot Institute and Consortium for Environmental Forestry Studies supported activities that led to the founding of METRIA.

Namø

Clyde M. Hunt

Silas Little

Alan J. Long

Henry Norweb

Edgar G. Rex

John J. Ryan

E.L. Shafer, Jr.

Kim C. Steiner

practices and research were reviewed as a basis for defining critical needs, opportunities, and strategies. We agreed on the need for better trees, better information, and better cooperation.

Momentum continued at a second conference held at the U.S. National Arboretum just six months later, in June 1974. The main subjects were the formation of an organization and the planning of a symposium. Committees developed proposals for each. Initial plans for the symposium had already been made in the preceding months, and support of the sponsoring agencies had been secured. A draft of a constitution for the new organization was prepared, and the name METRIA was selected from a soupbowl-full of acronyms. Further work on the organization and the symposium occupied us during the next year.

Symposium and technical conference

The symposium "Better Trees for Metropolitan Landscapes" was held in November, 1975. at the U.S. National Arboretum. Over 200 people from 23 states and three foreign countries came to review the state of the art and science in arboriculture and tree improvement. Specialists from many disciplines and agencies presented 29 papers on principles of selecting trees for metropolitan environments: selection strategies of planners, growers, and breeders; and ways of putting improved varieties into use. The symposium and the published proceedings (Santamour et al. 1976) fulfilled two needs foreseen by the organizers of METRIA. 1) Information was assembled from several disciplines that previously had been scattered and not readily accessible; and 2), people were brought together who have related responsibilities and interests. but whose paths seldom had met.

The response to the symposium was so enthusiastic that plans were made for regular meetings of an expanded membership. The first of these was held at Lanham, Maryland in July 1976, in conjunction with the 24th Northeastern Forest Tree Improvement Conference. Fourteen papers were presented on research results and practical applications. At a brief business session a revised draft of the constitution was discussed and accepted, and the following officers were elected (Exhibit 2):

Executive Director	Henry Gerhold
Assistant Director	Frank Santamour
Secretary-Treasurer	Alden Townsend
Executive Council	Raymond Brush
	Frank Cech
	William Collins
	David Karnosky

Subsequently the constitution (Exhibit 3) was revised for the fifth time, and adopted at a business meeting in August 1977 during the 53rd Convention of the International Society of Arboriculture in Philadelphia.

Constitution

The salient features of METRIA's constitution can be summarized briefly. The purpose of the Alliance is to provide, through education and research, opportunities for collaboration in developing better trees for metropolitan landscapes. Better trees can be developed by providing more useful information about choosing and managing trees for urban situations; by breeding improved cultivars; and by promoting the utilization of improved cultivars and better cultural techniques. Membership is open to all persons who are willing to work in the organization or otherwise support it, with no geographic restrictions. The activities of METRIA - projects, meetings, publications, and business matters - are administered by the officers and executive council. Among these are represented the interests of nurserymen, municipal arborists. highway landscaping officials, tree breeders, arboreta specialists, and related researchers. How effectively the Alliance functions, however, will depend ultimately on the contributions and energies of its entire membership.

Future activities

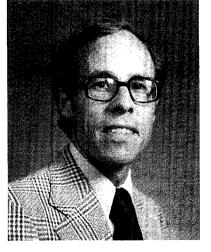
Looking ahead to the immediate future, we anticipate several kinds of activities. Newsletters will be sent at least annually to keep members informed of developments. Technical meetings will be held every two years, and whenever possible, these will be a part of or close to the meetings of other groups such as the International Society of Arboriculture, the Society of American Foresters, or regional Tree Improvement Conferences. Proceedings will continue to be published if it remains feasible. Workshops may be organized as needed in connection with other undertakings. A tree performance testing project is currently under development (Gerhold and Bartoe 1976), and might begin in 1978. We also want to explore possibilities for integrating soil testing and disease and insect surveys with performance testing. Another project to be investigated will select and preserve germplasm of trees that have value for breeding, via collaboration among breeders, arborists, and arboreta. Coordination among nurserymen and breeders in developing, testing, and releasing new varieties also will be considered. Promoting the use of improved cultivars and cultural techniques has both educational and legal ramifications which require further study before recommendations can be made. As these and other activities get underway, every member of METRIA will be expected to contribute to them according to his own talents.

Exhibit 2. The first elected officers of METRIA:



Executive Director — Henry Gerhold





Assistant Director — Frank Santamour

Secretary-Treasurer — Alden Townsend



Executive Council - Raymond Brush, Frank Cech, William Collins, David Karnosky.

Exhibit 3. Constitution of the Metropolitan Tree Improvement Alliance.

ARTICLE I. Name: The name of this organization shall be "Metropolitan Tree Improvement Alliance" (METRIA). Within the Constitution the organization hereafter is to be designated as "METRIA."

ARTICLE II. *Purpose*: The purpose of METRIA will be to provide opportunities for collaboration among members

- ARTICLE II. *Purpose:* The purpose of METRIA will be to provide opportunities for collaboration among members in developing better trees for metropolitan landscapes. Recognizing that trees provide amenities and essential values to people, particularly in urban and metropolitan regions and along transportation corridors, our objectives are:
 - A. To provide information that will enable wiser choices of species or cultivars for particular urban environments and uses; and information about managerial techniques that will lead to healthier, more beautiful trees.
 - B. To create tree cultivars having improved characteristics through breeding, selection, and propagation; and preserve valuable germplasm.
 - C. To promote the utilization of improved cultivars and better cultural techniques.
- ARTICLE III. Activities limited to Exempt Purposes: No part of the net earnings of METRIA, a non-profit organization incorporated at University Park, PA., shall inure to the benefit of, or be distributable to, its members, trustees, officers, or other private persons, except that METRIA shall be authorized and empowered to pay reasonable compensation for services rendered and to make payments and distributions in furtherance of the purposes set forth in ARTICLE II hereof. No substantial part of the activities shall be the carrying on of propaganda, or otherwise attempting to influence legislation and METRIA shall not participate in, or intervene in any political campaign of any candidate for public office. In the case of a written request from a governmental body, committee or subdivision, METRIA may provide technical assistance and advice providing it deemed appropriate to provide such assistance. Notwithstanding any other provisions of these articles, METRIA shall not carry on any other activities not permitted to be carried on (a) by an organization exempt from Federal income tax under Section 501(c)(3) of the Internal Revenue Code of 1954 (or the corresponding provision of any future United States Internal Revenue Law) or (b) by an organization, contributions to which are deductible under Section 170(c)(2) of the Internal Revenue Code of 1954 (or the corresponding provision of any future United States Internal Revenue Law).
- ARTICLE IV. *Membership:* Membership shall be open to all individuals who are willing to work in activities with the organization, and representatives of any other organization that provides financial or other material support. There will be no geographic restriction to membership. Membership eligibility, grades, and fees shall be determined by the Executive Council.

- ARTICLE V. Officers: Officers of METRIA shall consist of an Executive Director, Assistant Director, and Secretary-Treasurer. The Executive Director shall preside at all meetings and act as Chairman of the Executive Council. The Assistant Director shall preside during the Executive Director's absence. The Executive Director and Assistant Director shall be responsible for leadership in carrying out the purposes of METRIA. The Secretary-Treasurer shall issue all notices of meetings of METRIA and of the Executive Council; be responsible for keeping a record of all meeting proceedings; receive applications for memberships; conduct such correspondence as directed by the Executive Director and Executive Council; and collect and be custodian of all fees or any other funds belonging to METRIA. Officers of METRIA may be paid for their time and services in amounts determined by the Executive Council.
- ARTICLE VI. Executive Council: The Executive Council shall consist of the officers and from four to six other members. Among their qualifications should be an understanding of the interests of nurserymen, municipal arborists, highway landscaping officials, tree breeders, arboreta personnel, and related specialists. The Executive Council shall act as the governing body of METRIA, and shall fill interim vacancies among officers, approve proposed committee activities, and conduct other business as required to carry out the goals of METRIA.
- ARTICLE VII. Election of Officers and Council Members: Officers shall be elected at the regular meetings of METRIA and shall hold office for a term of two years, after which they may be re-elected no more than two additional consecutive terms. A committee appointed by the Executive Director shall nominate candidates for Officers and Council Members. Half of the Council members will be elected every second year for four-year terms, but not for consecutive terms. Executive Council meetings will be held at least once every two years.
- ARTICLE VIII. *Meetings:* Members of METRIA will meet once in two years, or more often if determined by the Executive Council. Notice of all meetings shall be sent to each member at least six (6) weeks before the date of said meeting. The time, place, and program of each meeting shall be approved by the Executive Council.
- ARTICLE IX. Quorum: Those members present plus two officers at any duly announced meeting shall constitute a quorum.
- ARTICLE X. Amendments: Any proposed amendment to this Constitution shall be distributed to all members at least six weeks before a regular meeting of METRIA, where it will be considered. To become effective, such amendment must be approved by at least two-thirds of the members present at the meeting.
- ARTICLE XI. *Dissolution:* Upon dissolution, the assets of METRIA will be dedicated to the Pinchot Institute, U.S. Forest Service.

This commitment of members to collaboration in a full range of tree improvement activities is what distinguished METRIA from related organizations. We recognize some overlap of interests with such groups as the Arboricultural Research and Education Academy of the International Society of Arboriculture, the Urban Forestry Working Group of the Society of American Foresters, and the Northeastern Forest Tree Improvement Conference. It is our intent to cooperate rather than compete with these organizations, while pursuing our interests in better metropolitan trees through the diverse affiliations of our members.

Literature Cited

 Gerhold, H.D., A.J. Long, M.E. Demeritt, Jr. 1975. Genetic information needed for metropolitan trees. J. For. 73(3): 150-153.

- Gerhold, H.D., W.D. Bartoe II. 1976. Performance testing tree cultivars in metropolitan environments. J. Arbor. 2(12): 221-227.
- Gerhold, H.D., K.C. Steiner. 1976. Selection practices of municipal arborists. In "Better Trees for Metropolitan Landscapes," USDA Forest Service Gen. Tech. Rpt. NE-22: 159-166.
- Long, A.J., H.D. Gerhold, M.E. Demeritt, Jr. 1973. Metropolitan tree planters survey: initial results. Penna. State U. Sch. Forest Resources. Res. Pap. 41, 13 pp.
- Santamour, F.S. Jr., H.D. Gerhold, S. Little, Eds. 1976. Better trees for metropolitan landscapes. USDA Forest Service Gen. Tech. Rpt. NE-22, 256 pp.

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GYPSY MOTH BIOLOGICAL CONTROL PROGRAM

by William W. Metterhouse

The New Jersey Department of Agriculture has strongly advocated the use of biological control organisms within an integrated control concept as a functional part of pest management programs. Since 1923 the Department has maintained a mass rearing biological laboratory in the propagation of control organisms for the suppression of Japanese beetle, Oriental fruit moth, European corn borer, European pine sawfly, cabbage looper, alfalfa weevil, gypsy moth, and more recently Mexican bean beetle and musk thistle.

Pest management as a control strategy is being emphasized by the United States Department of Agriculture and other state institutions throughout the nation. The advantages of the pest management concept are: the reduction of insect resistance, long-term benefits resulting from the self-perpetuating nature of biological control organisms, reduced production costs, energy conservation, and reduced environmental risks. Biological control therefore, becomes a necessary tool in preserving our natural resources and quality of life.

Of all the biological control programs gypsy moth has demanded greater time and work efforts. In 1963 the Department initiated the rearing, releasing and evaluation of gypsy moth parasites. This program is based on the philosophy that parasites are significant factors contributing to gypsy moth population collapse and stabilization. The objectives to be achieved in the parasite program are: 1) to colonize in newly infested areas, known, imported, and established parasites. These are parasites established in the New England states resulting from releases by the U.S. Department of Agriculture in the years 1902 through 1933. 2) To colonize new or exotic species of parasites in an effort to increase the biological resistance against the gypsy moth. It is, thus, the purpose to reduce the periodic destructive outbreaks.

We in New Jersey, as in other states, have accepted a pest management approach employing both chemical and biological control methods in