St. Louis, Missouri

Financial and Compliance Audit of Indirect Costs For the Years Ended December 31, 1999 and 2000

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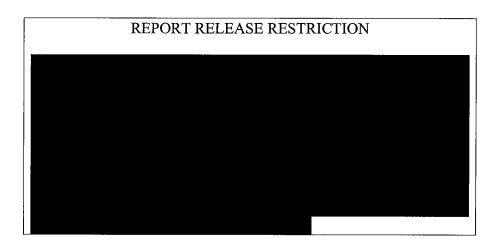


Table of Contents

	<u>Page</u>
Acronyms	1
Section I - Introduction and Audit Results:	
Background	3
Objective and Scope of Audit	3
Summary of Audit Results	4
Exit Conference	7
Section II - Findings and Recommendations:	
Independent Auditors' Report on Compliance and Internal Control	9
Findings and Recommendations on Internal Control	11
Finding and Recommendation on Compliance	15
Section III - Financial Schedules:	
Independent Auditors' Report	17
Financial Schedules:	
Schedule A - Schedule of Over/(Under) Recovered On-Site Indirect Costs on	
National Science Foundation Awards	19
Schedule A-1 - Schedule of Over/(Under) Recovered Off-Site Indirect Costs on	
National Science Foundation Awards	21
Schedule B-1 and B-2 - Schedule of Indirect Cost Calculation	23
Schedule B-1 - Indirect Cost Calculation	23
Schedule C, C-1 and C-2 - Schedule of Auditors' Adjustments and Eliminations	39
Notes to Financial Schedules	44
Section IV - Supplementary Information:	
Independent Auditors' Report on Supplementary Information	46
Schedule D-1 to D-14 - Detailed Schedule of (Over)/(Under) Recovered Indirect	
Costs by NSF Awards	47
Schedule E - Listing of NSF Awards Active During Audit Period Not Affected by	
Indirect Cost Audit	75
Section V - Awardee's Response	76

<u>Acronyms</u>

Acronym	Explanation of Acronym
AICPA	American Institute of Certified Public Accountants
DACS	Division of Acquisition and Cost Support
DGA	Division of Grants and Agreements
FCTR	Federal Cash Transactions Report
MBG	Missouri Botanical Garden
MTDC	Modified Total Direct Costs
NSF	U.S. National Science Foundation
OIG	Office of Inspector General

Office of Management and Budget

OMB

SECTION I INTRODUCTION AND AUDIT RESULTS

SECTION I -INTRODUCTION AND AUDIT RESULTS

BACKGROUND

The Missouri Botanical Garden (MBG), created by prominent St. Louis businessman Henry Shaw, is a not-for-profit charitable trust with a mission to discover and share knowledge about plants and their environment in order to preserve and enrich life. MBG's three primary functions are research, education, and horticultural display. Opened to the public in 1859, MBG has administrative offices on the grounds of the Garden in St. Louis, and off-site scientific locations in other parts of the United States, as well as in South and Central America, Africa, and Asia.

MBG generates approximately \$27 million of annual revenues mainly from contributions, bequests, donations, endowments, memberships, City of St. Louis tax revenue and grants and contracts. Of the approximate \$27 million of annual revenues, Federal financial assistance approximates \$1.1 million. The National Science Foundation (NSF) provides the most significant portion of the Federal financial assistance to MBG, approximately 60 percent on an annual basis, and is its cognizant Federal audit agency.

OBJECTIVE AND SCOPE OF AUDIT

At the request of the NSF Office of the Inspector General (OIG), M. D. Oppenheim & Company, P.C. conducted a financial and compliance audit of the indirect cost proposals prepared by MBG for the years ended December 31, 1999 and 2000 to determine final indirect cost rates for those years. During the period of our audit there were 14 NSF awards that included indirect costs based on a predetermined rate specified in the award letter and/or award budget. Our audit objectives were: (1) to determine whether MBG complied with Federal requirements in computing its indirect costs proposals; (2) to determine whether MBG over or under-recovered indirect costs on each NSF award active during the audit period, based upon the audit determined indirect cost rates; and (3) to evaluate the adequacy of MBG's internal controls to administer, account for, and monitor indirect cost charges to Federal awards.

To accomplish the objectives of the audit, we:

- Conducted an on-site audit survey with sufficient observations, interviews, and
 examinations of documents to make an initial determination whether
 predetermined rates were based on allowable indirect costs and whether controls
 to administer, account for, and monitor indirect costs are adequate to ensure
 compliance with Federal cost principles and administrative requirements.
- Prepared an audit planning document, for OIG review and approval. The planning document included a description of MBG's organizational structure and the process used to administer, account for, and monitor indirect cost charges to Federally sponsored awards. As part of the planning process we performed an assessment of audit risk and obtained an understanding of MBG's control environment.

- Prepared an internal control audit planning document for OIG review and approval. The internal control planning document included the proposed audit programs/procedures for testing the significant internal controls necessary to accurately administer, account for, and charge indirect cost charges to Federally sponsored awards. As part of the internal control review, we evaluated MBG's control environment, conducted a risk assessment, and analyzed information and communication and monitoring and control activities.
- Prepared a substantive audit testing planning document for OIG review and approval. The substantive planning document stated the preliminary results of the internal control phase of the audit, including any findings and recommendations and the proposed audit program, which included the tests on compliance with applicable laws and regulations and substantive testing procedures to be applied to the indirect cost pools and the direct cost base.
- Performed testing procedures to determine whether the indirect cost proposals and the resultant indirect cost rates comply with OMB Circulars A-110, *Uniform A dministrative Requirements for Grants and A greements with Institutions of Higher Education, Hospitals and Other Nonprofit Organizations*, and A-122, Cost Principles for Non-Profit Organizations.

We conducted our audit in accordance with AICPA auditing standards generally accepted in the United States of America, the Comptroller General's, *Government Auditing Standards* and included tests of the accounting records and other auditing procedures that we considered necessary to fully address the audit objectives.

SUMMARY OF AUDIT RESULTS

We identified significant deficiencies in MBG's calculation of its indirect cost rates for the two-year period ended December 31, 2000. The total audit adjustments and eliminations for those two years necessary to correct for the inaccuracies in the rate calculation amount to \$4,104,396 in total reductions to the indirect cost pools (or 52 percent of total cost pools), and \$77,176 total additions to the direct cost bases (or 1 percent of total direct cost bases). As a result of these adjustments, the audited indirect cost rates were substantially less than the rates proposed by MBG. NSF can use these audited indirect cost rates to assist in negotiating future predetermined rates for MBG. A comparison of these predetermined and proposed rates to the audited rates are as follows:

Fiscal Year	NSF Approved Predetermined Rates	MBG Proposed Rates	Audited Rates
FY 1999:			
On-site	84%	%	41.99%
Off-site	14.8%	%	18.52%
FY 2000:			
On-site	84%	%	41.46%
Off-site	14.8%	%	17.30%

As a result of errors in its rate calculation, MBG claimed \$19,024 more indirect costs than it actually incurred on all 14 NSF awards active during the two-year period ending December 31, 2000. (See Schedules A and A-1). However, when MBG proposed rates on its individual NSF awards, it generally used rates significantly lower than the negotiated predetermined rates. MBG believed its grant proposals would be more competitive if it used lower rates, generally between percent to percent on-site and percent to percent off-site. Although MBG billed indirect costs in its NSF awards at rates greater than the audited rate, resulting in the over-recovery of costs, it billed less than the predetermined rates. Had MBG billed at predetermined rates approved by NSF, MBG would have over-recovered substantially more.

We believe that MBG's proposed rates were significantly higher than its audited rates and that it claimed more indirect costs than it incurred because of the following internal control weaknesses and compliance deficiencies in its procedures and processes to administer, account for, and monitor its indirect costs.

Material Internal Control Weaknesses

- MBG does not maintain a general ledger system that segregates direct and indirect costs. It determines the actual breakdown of costs into direct and indirect cost categories only when it prepares its indirect cost proposal. At that time, staff prepare extensive worksheets delineating for each type of expense, the amounts that belong either in the indirect cost pool or in the direct cost base. MBG's general ledger does not separate direct and indirect costs because staff thought the use of spreadsheets was sufficient. However, the use of special worksheets to determine indirect and direct costs is inefficient and resulted in errors in its rate calculated.
- MBG does not have adequate control procedures for the preparation of indirect cost proposals. Specifically, it does not have written policies and procedures explaining the process to prepare and submit indirect cost proposals, because staff overlooked this requirement for effective internal controls. As a result, MBG improperly included \$4 million of curatorial costs in the indirect cost pools, and incorrectly classified \$423,540 of costs in the direct cost bases. These errors caused MBG to propose indirect cost rates as much as 52 percent higher than it actually incurred and to charge NSF \$19,024 more of indirect costs than it incurred, or 6.7 percent of total claimed indirect costs on the 14 NSF awards active during the audit period.
- Contrary to Federal cost principles, MBG does not maintain time and attendance records adequate to track, document, and certify the labor effort of staff who allocate time to different awards or to both direct and indirect activities. Nor does MBG maintain a written allocation plan to substantiate its payroll allocations between awards/projects or between direct and indirect costs. MBG does not maintain more detailed documentation of these labor costs because although management has to allocate time spent on specific awards and on direct and indirect costs for nearly 200 employees, it decided it was familiar enough with the employees' daily workloads to determine their levels of effort.

Non-Compliance

Contrary to Federal requirements, prior to FY 2000, MBG did not submit its indirect
cost proposals to NSF annually, as required, but instead submitted them biennially.
MBG stated that NSF orally approved its biennial submission practice, although NSF
does not recall doing so.

To address the internal control weaknesses and compliance deficiencies, we recommend that the Directors of NSF's Division of Acquisition and Cost Support (DACS) and the Division of Grants and Agreements (DGA) require that MBG (1) modify its current general ledger system to segregate direct and indirect costs; (2) develop written policies and procedures documenting its process for calculating indirect cost rates; (3) keep its staff up-to-date on Federal and NSF requirements for the preparation of indirect cost proposals; (4) maintain time and effort records to document the actual time staff work on projects and awards; and for all staff who work on both direct and indirect cost activities, to document actual time spent on each category; and (5) submit annual indirect cost proposals.

Summary of Auditee's Responses

MBG generally agreed with the findings, except for the exclusion of \$4.1 million of curatorial costs from the indirect cost pool. It stated that because curatorial costs are not project-specific and are incurred to maintain collections that are used for all research, they should be classified as indirect costs. Further, it stated that two similar institutions it contacted also classify curatorial costs as indirect costs.

Summary of Auditors' Responses to Auditee's Responses

MBG's comments regarding the classification of \$4.1 million of curatorial costs does not address the issue that curatorial costs are mission-related, which was central to the finding. We also reserve comment on MBG's reference to similar institutions since we have not audited these institutions. However, as noted in the transmittal letter to NSF management for this report, NSF-OIG has contacted four other botanical gardens that classify their curatorial costs as direct costs.

With respect to the Auditee's responses pertaining to the Schedule of Auditors' Adjustments and Eliminations (Schedule C), we do not agree with the exclusion of the \$4.1 million adjustment for curatorial costs as discussed above. MBG provided some additional support for the missing documentation for FY1999. This resulted in an immaterial increase in both the on-site and off-site indirect cost rates of .04%, respectively. We have not adjusted any of the financial schedules in the report as a result of the immaterial change. MBG agreed with the remaining auditors' adjustments and eliminations.

Exit Conference

An exit conference was held on June 7, 2002 at the Auditee's office located at 2345 Tower Grove, St. Louis, Missouri. The findings on compliance and internal control along with the adjustments and eliminations related to the indirect cost proposals were discussed by the following individuals.

For Missouri Botanical Garden:



For M.D. Oppenheim & Company, P.C.:



SECTION II FINDINGS AND RECOMMENDATIONS

National Science Foundation Office of Inspector General 4201 Wilson Boulevard Arlington, Virginia 22230

INDEPENDENT AUDITORS' REPORT ON COMPLIANCE AND INTERNAL CONTROL

We have audited the summary schedule of over/(under) recovered indirect costs (Schedule A) and the schedules of indirect/direct costs (B-1 to B-2) which summarize the indirect cost proposals prepared by the Missouri Botanical Garden for the years ended December 31, 1999 and 2000, and have issued our report thereon dated June 7, 2002. We conducted our audit in accordance with auditing standards generally accepted in the United States of America, the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States and the *National Science Foundation Audit Guide* (September 1996).

Compliance

As part of obtaining reasonable assurance about whether the Missouri Botanical Garden's financial schedules are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, and policies, noncompliance with which could have a direct and material effect on the determination of the financial schedules amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed the instance of noncompliance, as reported in the accompanying Finding and Recommendation on Compliance and the adjustments and eliminations noted in Schedules C-1 and C-2, that are required to be reported under *Government Auditing Standards* and the *National Science Foundation Audit Guide*.

Internal Control Over Financial Reporting

In planning and performing our audit, we considered the Missouri Botanical Garden's internal control over financial reporting in order to determine our auditing procedures for the purposes of expressing our opinion on the financial schedules and not to provide assurance on the internal control over financial reporting. However, we noted certain matters involving internal control over financial reporting and its operation that we consider to be reportable conditions. Reportable conditions involve matters coming to our attention relating

National Science Foundation Office of Inspector General Arlington, Virginia

<u>Internal Control Over Financial Reporting (Cont.)</u>

to significant deficiencies in the design or operation of the internal control over financial reporting that, in our judgment, could adversely affect the Missouri Botanical Garden's ability to record, process, summarize and report financial data consistent with the assertions of management in the financial schedules. The reportable conditions noted are described in the accompanying Findings and Recommendations on Internal Control.

A material weakness is a condition in which the design or operation of one or more of the internal control components does not reduce to a relatively low level the risk that misstatements in amounts that would be material in relation to the financial schedules being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions. Our consideration of the internal control over financial reporting would not necessarily disclose all matters in the internal control that might be reportable conditions and, accordingly, would not necessarily disclose all reportable conditions that are also considered to be material weaknesses. However, we believe that the above reportable conditions described in the three findings are material weaknesses.

This report is intended solely for the information and use of the Missouri Botanical Garden and the National Science Foundation and is not intended to be and should not be used by anyone other than these specified parties.

M.D. Oppenheim & Company, P.C.

June 7, 2002

Findings and Recommendations on Internal Control For the Years ended December 31, 1999 and 2000

Material Weaknesses

1. General Ledger Does Not Separately Identify Direct and Indirect Costs

Effective internal controls and Federal administrative guidelines require that recipients of Federal funds have a financial management system that allows it to determine which of its costs are direct and which are indirect. The financial management system should provide effective controls over and accountability for all funds; written procedures for determining the reasonableness, allocability and allowability of costs in accordance with applicable Federal cost principles, which specifically discuss allocation of direct and indirect costs; and accounting records, including cost accounting records, that are supported by source documentation.

MBG does not have a financial management system that allows it to determine readily which of its costs are direct and which are indirect. MBG's general ledger, which contains approximately 50 cost centers, does not separate direct from indirect costs; and MBG only breaks out direct and indirect costs in the cost centers when it prepares indirect cost proposals. This process requires MBG to prepare extensive worksheets that indicate, for each type of expense, the costs applicable to either the direct or indirect cost pool.

For example, each of the 50 departmental cost centers post salaries and wages to the general ledger; and although the salaries and wages could contain both direct and indirect costs, no centers delineate between these two cost categories at the time of posting to the ledger. Rather, the determination of direct and indirect payroll costs to calculate rates for the indirect cost proposals requires the preparation of various worksheets, including one that lists every employee by department, job and salary, and the breakdown of that salary into direct and indirect costs. MBG's general ledger, however, does not segregate direct from indirect costs as these costs are incurred, because it was never set up to identify the indirect cost pools for Federal purposes, and because staff concluded that the delineation of these two cost categories by means of worksheets was adequate. However, as a result of mixing the costs in the general ledger, MBG cannot easily use it to identify the actual direct and indirect costs incurred by department, expense account, or indirect cost proposal category and has to perform additional cumbersome calculations, which are inefficient and have resulted in errors, such as those found in this audit.

Recommendation

We recommend that the Director of NSF's Division of Acquisition and Cost Support in conjunction with the Director of the Division of Grants and Agreements require MBG to modify its current general ledger system so that it segregates all costs into their direct and indirect components, as required by effective internal controls and Federal administrative guidelines.

Auditee's Response

MBG finds the recommended modification of the general ledger system to be impractical in the short run. Instead, for the near future MBG will use an excel spreadsheet to compile the data. Since MBG now has an extemporaneous system to capture actual time worked for direct and indirect costs, and can base its excel spreadsheet calculations on this actual data, this method will effectively determine and account for direct costs and indirect costs. Then, in July, 2004, MBG will move to a new accounting system that will enable it to charge direct and indirect costs directly to the general ledger as these costs are incurred.

Auditors' Response to Auditee's Response

MBG agrees with our finding and acknowledges the need to modify its general ledger system. The interim solution of utilizing excel spreadsheets pending the installation of a new accounting system in July, 2004 is an adequate, temporary solution.

2. <u>Inadequate Procedures to Prepare Indirect Cost Rate Proposals</u>

Effective internal controls require an organization to have written policies and procedures detailing processes for the preparation of indirect cost rate proposals that comply with Federal requirements. Written procedures provide guidance on what costs are allowable or unallowable, what costs are direct or indirect, and what costs are included or excluded from indirect cost rate calculations. MBG does not have written policies and procedures explaining its processes for proposing indirect cost rates because its staff did not understand the role of such policies and procedures in ensuring accurate indirect cost rate calculations. The lack of written procedures for the preparation of indirect cost rate proposals contributed to material errors in MBG's calculation of its indirect cost rates for the two-year period ended December 31, 2000.

Specifically, MBG overstated its indirect costs by \$4,059,102 over those two years by erroneously including direct curatorial costs in the indirect cost pools. (See Schedules B-1 and B-2). OMB Circular A-122 states that "[d]irect costs are those that can be identified specifically with a particular final cost objective, i.e., a particular award, project, service, or other direct activity of an organization." More generally, direct costs are those that can be identified with an organization's mission. Since MBG's mission is to discover and share knowledge about plants, MBG's curatorial costs to collect, preserve and maintain plants are part of its mission-related costs. Alternatively its curatorial costs are project-specific expenses. In either case, MBG's curatorial costs are direct costs and should have been excluded from the indirect cost pools.

MBG also incorrectly classified \$423,540 of costs in the direct cost bases. It both understated and overstated its bases by a net amount of \$77,176.\(^1\) As a result of errors in computing its indirect cost pools and direct cost bases, MBG proposed indirect cost rates as much as 52 percent higher than it actually incurred. In addition, MBG charged NSF

Subcontract and fixed asset costs, which should have been excluded from the direct cost bases: (\$ 173,182)

Costs that should have been included in the direct cost bases*: \$250,358

Net amount added to the direct cost bases for the two years audited: \$77.176

^{*}The \$250,358 that should have been included in the direct cost base represents the difference between actual cost per the books of account and the costs per the indirect cost proposals.

\$19,024, more of indirect costs than it incurred or 6.7 percent of total claimed indirect costs on the 14 NSF awards active during the audit period.

Recommendation

We recommend that the Director of NSF's Division of Acquisition and Cost Support in conjunction with the Director of the Division of Grants and Agreements require MBG to a) develop and implement written policies and procedures to document how it calculates indirect cost rates in compliance with Federal and NSF requirements, and b) keep its financial staff up-to-date on these requirements.

Auditee's Response

MBG has begun to develop the recommended written policies and procedures. However, MBG disagrees with the finding that \$4,059,102 of curatorial costs should be excluded from the indirect cost pool. Curatorial costs are incurred to collect and maintain natural history specimens, which are made available to all researchers. MBG believes that these costs are not project-specific, and should be included in the indirect cost pool. Further, MBG has contacted the California Academy of Sciences and the Field Museum in Chicago, institutions similar in size and programs and with similar amounts of funding from NSF and other Federal agencies. Like MBG, both organizations maintain herbarium collections for research, and both include their curatorial costs in their indirect cost pools. MBG requests that the proposed adjustment to exclude curatorial costs be reversed and the rate restored to reflect that change.

Auditors' Response to Auditee's Response

MBG does not address the issue that its curatorial costs for plant collection and preservation are mission-related, and as such, are direct costs. In addition, we reserve comment on MBG's response regarding other similar institutions, since we have not audited those institutions. However, NSF-OIG contacted four other botanical gardens that classify curatorial costs as direct costs. (See the letter OIG has attached to the copy of this report for NSF management).

3. <u>Inadequate Payroll Allocation and Time and Attendance Records</u>

Federal cost principles require that an organization receiving Federal funds should maintain personal activity reports to record the actual time employees worked on federal awards. Federal cost principles also require personal activity reports for employees who work on both direct and indirect cost activities.

MBG did not prepare personal activity reports to record the actual time worked by employees as required by Federal guidelines. MBG allocated the time for approximately 180-190 staff respectively for 1999 and 2000 to the direct or indirect cost pools; but it did not support this allocation with certified after-the-fact personal activity reports. MBG's "allocation plan" is a monthly worksheet, prepared by the Director of Research, which is based upon award budgets. This worksheet allocates salary costs to each award based not on actual labor effort but on budgeted estimates of each applicable staff person's labor efforts, usually in monthly equivalents.

MBG does maintain time records for all employees. However, the records merely indicate whether an employee was working on a particular day during a pay period. The time records for hourly staff indicate hours worked on a daily basis, and holiday and leave time utilized. The time records for salaried staff are payroll by exception and only indicate if the employee is absent and whether the absence represents holiday or leave time. Neither time records indicate the actual time worked on each award nor do the records differentiate between the time an employee spent on direct versus indirect activities.

More specifically, for the indirect cost proposals we audited, MBG did not maintain personal activity reports to support its allocation of costs between research (i.e., direct expenses) and curatorial costs (incorrectly classified as indirect costs). Thus, MBG not only erroneously included \$4 million of curatorial costs in the indirect cost pool but also allocated approximately 40 percent of research department costs to indirect cost the pool on the basis of management review of departmental job classifications, not actual time card records. Also, MBG should have personal activity reports for all "research" employees whose salaries and wages are included in the direct cost base, because even if management estimates that these persons spend 100 percent of their time on direct research costs, it is likely that some of their time is spent in indirect cost activities, such as preparing proposals; and the estimates may be inaccurate.

Recommendation

We recommend that the Directors of NSF's Divisions of Division of Acquisition and Cost Support in conjunction with the Director of the Division of Grants and Agreements require MBG to maintain detailed time and effort records to document 1) the actual time worked on each project/award, and 2) the direct and indirect cost allocations for all employees (including all those currently classified 100 percent as research staff), who spend time on both indirect and direct cost activities.

Auditee's Response

MBG agrees with this finding and has implemented a time-keeping system to document the actual time worked on each project/award as well as time spent on direct and indirect cost activities. These hours are recorded on individual time sheets and subsequently summarized on a spreadsheet to create the necessary direct/indirect allocations.

Auditors' Response to Auditee's Response

We have reviewed a sample of time records that MBG provided to us, and they indicate that the new timekeeping system adequately addresses the recommendation.

Finding and Recommendation on Compliance For the years ended December 31, 1999 and 2000

Material Deficiency

1. Indirect Cost Proposal Not Submitted Annually

OMB Circular A-122 specifies that organizations that have previously established indirect cost rates must submit a new indirect cost proposal to the cognizant agency within six months after the close of each fiscal year. NSF is MBG's cognizant agency because it provides the Garden with the largest dollar volume of awards among all Federal agencies providing research and/or education related funding.

However, MBG has not submitted its indirect cost proposal to NSF on an annual basis. Prior to fiscal year 2000, the indirect cost proposal had been prepared and submitted on a bi-annual basis (FY 1999, 1997, 1995, etc.). MBG did, however, submit an indirect cost proposal for FY 2000 upon NSF's specific request. MBG stated that its standard practice was to submit indirect cost proposals to NSF every other year because NSF's Cost Analysis Resolution Branch approved its biennial practice orally, but not in writing. The annual preparation and submission of an indirect cost proposal for multi-year awards is critical because conditions often occur that affect the final proposed rate from one year to the next.

Recommendation

We recommend that the Directors of NSF's Division of Acquisition and Cost Support in conjunction with the Division of Grants and Agreements require MBG to submit annual indirect cost proposals.

Auditee's Response

MBG will comply with this recommendation.

Auditors' Response to Auditee's Response

Since MBG is willing to submit its indirect cost rate proposal on an annual basis a response is not necessary.

²NSF's Cost Analysis and Audit Resolution Branch does not recall approving this practice orally or in writing.

SECTION III FINANCIAL SCHEDULES

National Science Foundation Office of Inspector General 4201 Wilson Boulevard Arlington, Virginia 22230

INDEPENDENT AUDITORS' REPORT

We have audited the indirect cost proposals, the Missouri Botanical Garden has proposed as applicable to the National Science Foundation and other federal awards for the years ended December 31, 1999 and 2000. These indirect cost proposals, as presented in the schedules of indirect/direct costs (Schedules B-1 and B-2) and the schedule of over/(under) recovered onsite indirect costs (Schedule A) are the responsibility of the Missouri Botanical Garden 's management. Our responsibility is to express an opinion on Schedules A and B-1 and B-2 based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America, *Government Auditing Standards* issued by the Comptroller General of the United States, and the *National Science Foundation Audit Guide* (September 1996). Those standards and the *National Science Foundation Audit Guide* require that we plan and perform the audit to obtain reasonable assurance about whether the financial schedules are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial schedules. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial schedule presentation. We believe our audit provides a reasonable basis for our opinion.

The accompanying financial schedules were prepared for the purpose of complying with the requirements of the *National Science Foundation Audit Guide* as described in Note 1, and are not intended to be a complete presentation of financial position in conformity with accounting principles generally accepted in the United States of America.

In our opinion, the financial schedules referred to above present fairly, in all material respects, the indirect cost proposals (Schedules B-1 and B-2) and the resultant over/(under) recovered indirect costs (Schedule A) for the years ended December 31, 1999 and 2000 on the basis of accounting described in Note 1.

National Science Foundation Office of Inspector General Arlington, Virginia

In accordance with *Government Auditing Standards*, we have also issued our report dated June 7, 2002 on our consideration of the Missouri Botanical Garden 's internal control over financial reporting and on our tests of its compliance with laws and regulations. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be read in conjunction with this report in considering the results of our audit.

Schedules C-1 and C-2 contain indirect costs in the amount of \$4,104,396 that are reductions to the indirect costs proposed and \$77,176 that are additions to the direct costs proposed for the years ended December 31, 1999 and 2000. The final determination, as to whether such costs are allowable or unallowable, will be made by the National Science Foundation. The ultimate outcome of this determination cannot presently be determined.

This report is intended solely for the information and use of the Missouri Botanical Garden and the National Science Foundation and is not intended to be and should not be used by anyone other than these specified parties.

M.D. Spenkein & Company, P.C.

June 7, 2002

Schedule of Over/(Under) Recovered On-Site Indirect Costs on National Science Foundation Awards For the Period January 1, 1999 to December 31, 2000

		Indirect Cost Rate Approved	/Billed		Indirect Costs Rates Proposed/Audited			Indirect Costs					
NSF Award Number	Award Period	<u>Cost Method</u>	Rate		Year Ended	Proposed Rate	Audited Rate	Schedule Reference	Per Audit	Claimed To NSF	Allowed (Approved (Rate x MTDC)	Over/ (Under) Over/ (Under) Recovered Per Recovered Audited Rate Allowed Rate	Per Comment/
DEB-9307063	1/15/94-6/30/99	Predetermined Fixed Rate (MTDC)	64.30% 64.30% 64.30%	(B)	12/31/99		41.99%	B-1	<u>\$_3,794</u>		\$_5,810	<u>\$ 2,016</u> <u>\$ -</u>	<u>)</u> -
DEB-9420140	4/1/95-3/31/00	Predetermined Fixed Rate (MTDC)	64.30% 72.90% 67.60%	(B)	12/31/99		41.99%	B-1	<u>\$ 4,935</u>		<u>\$ 7,557</u>	<u>\$_3,010</u>	3
DEB-9522034	9/1/95-8/31/02	Predetermined Fixed Rate (MTDC)	64.30% 64.30% 64.30%	(B)	12/31/99 12/31/00		41.99% 41.46%	B-1 B-2	\$ 11,868 <u>21,461</u> \$ 33,329		\$ 18,174 33,284 \$ 51,458	\$ 6,307 \$ \[\frac{11.822}{\$ 18,129} \] \(\frac{1}{5} \)	
DEB-9525938	2/1/96-12/31/00	Predetermined Fixed Rate (MTDC)	67.60% 64.30% 64.30%	(B)	12/31/99 12/31/00		41.99% 41.46%	B-1 B-2	\$ 3,793 906 \$ 4,699		\$ 5,808 1,405 \$ 7,213	\$ 2,016 \$	(D)
DEB-9627072	9/1/96-2/28/00	Predetermined Fixed Rate (MTDC)	67.60% 64.30% 64.30%	(B)	12/31/99 12/31/00		41.99% 41.46%	B-1 B-2	\$ 11,758 <u>3,964</u> <u>\$ 15,722</u>		\$ 18,005 6,148 \$ 24,153	\$ 1,292 \$ (4,95. (3,964)(6,14: \$(2,672) \$ (11,10.	(D)
DEB-9626747	9/15/96-8/31/02	Predetermined Fixed Rate (MTDC)	67.60% 64.30% 64.30%	(B)	12/31/99 12/31/00		41.99% 41.46%	B-1 B-2	\$ 6,114 <u>4,847</u> <u>\$ 10,961</u>		\$ 9,363 	\$ 3,248 \$ (2,670	<u>)</u> -
DEB-9626806	10/1/96-9/30/99	Predetermined Fixed Rate (MTDC)	67.60% 64.30% 64.30%	(B)	12/31/99		41.99%	B-1	<u>\$ 69,415</u>		<u>\$ 106,296</u>	<u>\$ (61.316)</u> \$ (98.19)	<u>(</u>) (D)
DEB-9870231	8/15/98-7/31/01	Predetermined Fixed Rate (MTDC)	67.60% 67.60% 67.60%	(B)	12/31/99 12/31/00		41.99% 41.46%	B-1 B-2	\$ 4,868 5,579 \$ 10,447		\$ 7,838 9,097 \$ 16,935	\$ 2,970 \$ -4 3,518 -4 \$ 6,488 \$ -4	<u>)</u> -
DEB-9870694	9/15/98-8/31/01	Predetermined Fixed Rate (MTDC)	67.60% 67.60% 67.60%	(B)	12/31/99 12/31/00		41.99% 41.46%	B-1 B-2	\$ 286 17,326 \$ 17,612		\$ 460 <u>28,250</u> \$ 28,710	\$ 174 \$) - -
DEB-9981642	3/1/00-2/28/02	Predetermined Fixed Rate (MTDC)	84.00% 69.60% 69.60%	(B)	12/31/00		41.46%	B-2	<u>\$ 3,181</u>		\$ 5,340	<u>\$ 2,159</u> <u>\$</u> -	<u>)</u> -
DEB-9981249	6/15/00-5/31/02	Predetermined Fixed Rate (MTDC)	84.00% 84.00% 69.60%	(B)	12/31/00		41.46%	B-2	<u>\$_2,043</u>		<u>\$ 4,139</u>	<u>\$. 1.386</u> <u>\$ (71</u> 6))
DEB-0072682	8/15/00-7/31/01	Predetermined Fixed Rate (MTDC)	84.00% 69.60% 69.60%	(B)	12/31/00		41.46%	B-2	<u>\$ 54,496</u>		<u>\$ 91.484</u>	\$ 36,989 \$	<u>.</u>
DEB-0072657	8/15/00-7/31/03	Predetermined Fixed Rate (MTDC)	84.00%	(A)	12/31/00		41.46%	B-2	<u>\$2,506</u>		<u>\$4,207</u>	<u>\$ 1.701</u> <u>\$ -</u>	<u>}</u> -

See accompanying notes to these financial schedules.

Schedule of Over/(Under) Recovered On-Site Indirect Costs on National Science Foundation Awards (Cont.) For the Period January 1, 1999 to December 31, 2000

		Indirect Cost Rate Approved	Indirect Cost Rate Approved/Billed Indirect Costs Rates Proposed/Audited Indirect Costs				Indirect Costs Rates Proposed/Audited							
NSF Award Number	Award Period	Cost Method	Rate		Year Ended	Proposed Rate	Audited Rate	Schedule Reference	Per Audit	Claimed ToNSF	Allowed (Approved (Rate x MTDC)	Over/ (Under) Recovered Per Audited Rate	Recovered Per	Comment/
			69.60% 69.60%											
DEB-0072433	9/15/00-8/31/03	Predetermined Fixed Rate (MTDC)	84.00% 69.60%	• •	12/31/00		41.46%	B-2	\$_2,054	\$	\$ 3,448	<u>\$1,393</u>	<u>\$(1</u>)	
			69.60%						<u>\$ 235,194</u>	\$	\$.373,630	<u>\$ 27,715</u>	<u>\$ (110,721</u>)	

Comments/Notes:

MTDC = Modified Total Direct Costs. (Total direct program costs less equipment and participant support costs).

- (A) Rate per negotiated agreement with NSF.
- (B) Rate per award and/or award budget.
- (C) Rate billed by MBG.
- (D) (Under) recovered indirect costs cannot be recovered on this award since the award is closed and the total costs (direct and indirect) were billed up to the budget maximum.
- (E) For awards with predetermined fixed indirect costs rates, NSF allows awardees to bill at either the rate established at the time the award was provided for the lifetime of the award or at the rates negotiated for each of the subsequent years of the award. The only requirement NSF imposes on this decision is that the awardee uses the selected method consistently to charge its indirect costs on all its NSF awards.' MBG's practice is to use the indirect cost rate in the award letter for the life of the award.

See GPM (02-151), section 633.1 b2 for restrictions on the option to use each year's negotiated rate for indirect cost recovery.

Schedule of Over/(Under) Recovered Off-Site Indirect Costs on National Science Foundation Awards

For the Period January 1, 1999 to December 31, 2000

		Indirect Cost Rate Approved/	Billed		Indirect Co	sts Rates I	Proposed/	Audited				t Costs		
NSF Award Number	Award Period	Cost Methad	Rate		Year Ended	Proposed Rate		Schedule Reference	Per Audit	Claimed To <u>NSF</u>	Allowed (Approved Rate x MTDC)		Over (Under) Recovered Per C Allowed Rate	Comment/ Notes
DEB-9307063	1/15/94-6/30/99	Predetermined Fixed Rate (MTDC)	14.80% 13.70% 13.70%	(A) (B) (C)	12/31/99		18.52 %	B-1	<u>\$ 998</u>		<u>\$ 738</u>	<u>\$ (260)</u>	<u>\$</u> -0-	(E)
DEB-9522034	9/1/95-8/31/02	Predetermined Fixed Rate (MTDC)	14.80% 13.70% 13.70%	(A) (B) (C)	12/31/99 12/31/00		18.52% 17.30%	B-1 B-2	\$ 6,037 <u>842</u> \$ 6,879		\$ 4,466 667 \$ 5,133	\$ (1,571) (175) \$ (1,746)	\$ -0- -0- \$ -0-	
DEB-9525938	2/1/96-12/31/00	Predetermined Fixed Rate (MTDC)	14.80% 13.70% 13.70%	(A) (B) (C)	12/31/99 12/31/00		18.52% 17.30%	B-1 B-2	\$ 448 692 \$ 1,140		\$ 331 548 \$_879	\$ (117) (144) <u>\$ (261)</u>	\$ -0- 	(E) (E)
DEB-9627072	9/1/96-2/28/00	Predetermined Fixed Rate (MTDC)	14.80% 13.70% 13.70%	(A) (B) (C)	12/31/99 12/31/00		18.52% 17.30%	B-1 B-2	\$ 3,814 1,901 \$ 5.715		\$ 2,821 1,506 \$ 4,327	\$ (993) (1,901) <u>\$ (2,894)</u>	\$ -0- _(1,506) <u>\$ (1,506)</u>	(E) (E)
DEB-9626747	9/15/96-8/31/02	Predetermined Fixed Rate (MTDC)	14.80% 13.70% 13.70%	(A) (B) (C)	12/31/99 12/31/00		18.52% 17.30%	B-1 B-2	\$ 1,699 		\$ 1,257 1,034 \$ 2,291	\$ (442) (271) \$ (713)	\$ -0- <u>-0</u> - <u>\$ -0</u> -	
DEB-9870231	8/15/98-7/31/01	Predetermined Fixed Rate (MTDC)	14.80% 13.90% 13.90%	(A) (B) (C)	12/31/99 12/31/00		18.52% 17.30%	B-1 B-2	\$ 3,410 <u>8,456</u> \$ 11,866		\$ 2,559 6,794 \$ 9,353	\$ (851) <u>(1,662)</u> \$_(2,513)	\$ -0- <u>-0</u> - <u>\$ -0</u> -	
DEB-9870694	9/15/98-8/31/01	Predetermined Fixed Rate (MTDC)	14.80% (D) 13.90%	(A) (C)	12/31/99 12/31/00		18.52% 17.30%	B-1 B-2	\$ 179 		\$ 143 	\$ (44) (233) \$ (277)	\$ (8) (62) \$ (70)	
DEB-9981249	6/15/00-5/31/02	Predetermined Fixed Rate (MTDC)	14.80% (D) 14.80%	(A) (C)	12/31/00		17.30%	B-2	<u>\$ 69</u>		<u>\$ 59</u>	<u>\$(10)</u>	<u>\$ -0</u> -	
DEB-0072657	8/15/00-7/31/03	Predetermined Fixed Rate (MTDC)	14.80% 14.80% 14.80%	(A) (B) (C)	12/31/00 Total		17.30%	B-2	\$ 121 \$ 31.154		\$104 \$_24.039	\$ (17) \$ (8,691)	<u>\$0</u> - \$ (1.576)	

Schedule of Over/(Under) Recovered Off-Site Indirect Costs on National Science Foundation Awards For the Period January 1, 1999 to December 31, 2000

Comments/Notes:

MTDC = Modified Total Direct Costs. (Total direct program costs less equipment and participant support costs).

- (A) Rate per negotiated agreement with NSF.
- (B) Rate per award and/or award budget.
- (C) Rate billed by MBG.
- (D) No off-site rate specified in the award or award budget.
- (E) (Under) recovered indirect costs cannot be recovered on this award since the award is closed and the total costs (direct & indirect) were billed up to the budget maximum.

Indirect Cost Calculation For the Year Ended December 31, 1999

(A)

	Proposed Costs	Auditors' Adjustments and Eliminations	Allowable Costs
Direct Cost Base (Research Costs-MTDC)	\$	\$	\$
Indirect Cost Pool:			
Curatorial Expenses Library Expenses Administrative Expenses (Research Department) Maintenance, Security, Utilities and Other	\$	\$	\$ -0-
Related Expenses (Research Department) Depreciation Expense (Research Department)			
Total Indirect Costs	<u>\$.</u>	\$	<u>\$ 1,923,872</u>
Computation of Indirect Cost Rate: On-Site Rate:	Per MBG	Per Audit	
Total indirect costs Total direct costs	\$	\$ 1,923,872 \$ 4,582,233	
Computed Indirect Cost Rate (On-Site)	<u>87.27</u> %	6 <u>41.99</u> %	
Off-Site Rate: Total administrative indirect costs Total direct costs	\$ \$	\$ 848,800 \$ 4,582,233	
Computed Indirect Cost Rate (Off-Site)	(B)	518.52%	

- (A) See Schedule B-la to B-If for breakdown of adjustments and eliminations.
- (B) MBG indirect cost proposal utilized rounded rates of 87.3% and 18.6%, respectively.

Schedule of Direct Costs For the Year Ended December 31, 1999

Expenses	(A) Proposed Costs	AA.4-1 Adjustments And Eliminations	Note No.	Allowable Costs
Grants, Contracts & Special Accounts:				
Salaries and wages	\$	\$	C-1	\$
Fringe benefits			C-1	
Other expenses			C-1	
Total Grants, Contracts & Special				
Accounts				3,005,169
Research Division:				
Salaries and wages				
Fringe benefits				
Other expenses				
Chief expenses				
Total Research Division				1,051,795
Scientific Publications:				
Salaries and wages			C-1	
Fringe benefits			C-1	
Other expenses			C-1	
Total Scientific Publications				525,269
Total Direct Costs	<u>\$</u>	\$		<u>\$ 4,582,233</u>

(A) The amounts agree with the indirect cost rate proposal submitted by the Missouri Botanical Garden (MBG). The total costs before auditors' adjustments and eliminations agree with MBG's books of account, except as noted in the auditors' adjustments and eliminations.

Schedule of Curatorial Expenses For the Year Ended December 31, 1999

<u>Expenses</u>	(A) Proposed <u>Costs</u>	Auditors' Adjustments And Eliminations		Allowable <u>Costs</u>
Salaries and wages Fringe benefits	\$	\$	C-1 C-1	\$ 0- -0-
Other expenses			C-1	-0-
Greenhouse costs			C-1	-0-
Herbarium Costs:				
Salaries and wages			C-1	-0-
Fringe benefits			C-1	-0-
Other expenses			C-1	
Subtotal prior to allocation from other cost centers Administrative Expenses (Schedule B-1d) Maintenance, Security, Utilities and Other Related Expenses (Schedule B-1e) Depreciation expense (Schedule B-1f)		*	C-1 C-1 C-1	-0- -0- -0-
Total Curatorial Expenses	<u>\$</u>	\$		<u>\$0</u> -
Curatorial Expenses Allocation Factor (B)	\$%	\$%		\$ -0- <u>93.62243</u> %
Indirect Cost Pool Curatorial Expenses	<u>\$</u>	<u>\$</u>		<u>\$ -0</u> -

- (A) The amounts agree with the indirect cost rate proposal submitted by the Missouri Botanical Garden (MBG). The total costs before auditors' adjustments and eliminations agree with MBG's books of account.
- (B) Allocation based upon a reduction for outside public use of MBG research facilities of 6.37757%. Therefore the actual usage is 93.62243% (100% 6.37757%).
- * The adjustment from the referenced schedule was increased to the total proposed costs due to the elimination of curatorial costs from the indirect cost pool.

Schedule of Library Expenses For the Year Ended December 31, 1999

<u>Expenses</u>	(A) Proposed <u>Costs</u>	Auditors' Adjustments and Eliminations	Allowable <u>Costs</u>
Salaries and wages	\$	\$	\$
Fringe benefits		,	
Other expenses			
Subtotal prior to allocation from other cost centers Administrative Expenses (Schedule B-1d) Maintenance, Security, Utilities and Other Related Expenses (Schedule B-1e)		*	
Depreciation expense (Schedule B-1f)			
Total Library Expenses	\$	\$	\$ 709,039
Library Expenses Allocation Factor (B)	\$	\$	\$ 709,039 <u>93.62243</u> '
Indirect Cost Pool Library Expenses	<u>\$</u>	\$	<u>\$ 663,819</u>

- (A) The amounts agree with the indirect cost rate proposal submitted by the Missouri Botanical Garden (MBG). The total costs before auditors' adjustments and eliminations agree with MBG's books of account.
- (B) Allocation based upon a reduction for outside public use of MBG research facilities of 6.37757%. Therefore the actual usage is 93.62243% (100% 6.37757%).

^{*} See allocation adjustment in referenced schedule.

Schedule of Administrative Expenses For the Year Ended December 31, 1999

<u>Expenses</u>	(A) Proposed <u>Costs</u>	Auditors' Adjustments and Eliminations	Note No.	Allowable <u>Costs</u>
Salaries and wages Fringe benefits	\$	\$		\$
Other expenses			C-1	
Human Resources Management Costs:				
Salaries and wages				
Fringe benefits				
Other expenses		····		
Subtotal prior to allocation from				
other cost centers				
Maintenance, Security, Utilities and				
Other Related Expenses (Schedule B-1e)			*	
Depreciation expense (Schedule B-1f)				
Total Administrative Expenses	\$	<u>\$</u>		<u>\$ 3,729,193</u>
Allocation of Administrative				
Expenses (B):				
Curatorial Expenses	\$	\$		\$
Library Expenses				
Research Department				
Other Departments				
Total Administrative Expenses	\$	\$		<u>\$ 3,729,193</u>

- (A) The amounts agree with the indirect cost rate proposal submitted by the Missouri Botanical Garden (MBG). The total costs before auditors' adjustments and eliminations agree with MBG's books of account.
- (B) The allocation percentages are based upon the total direct costs of the curatorial, library, research and other departments as a percentage of this total.

See accompanying notes to these financial schedules.

^{*} See allocation adjustment in referenced schedule.

Schedule of Maintenance, Security, Utilities and Other Related Expenses For the Year Ended December 31, 1999

<u>Expenses</u>	(A) Proposed <u>Costs</u>	Auditors' Adjustments and Eliminations	Note <u>No.</u>	Allowable <u>Costs</u>
Maintenance Expenses: Salaries and wages Fringe benefits Other expenses	\$	\$	C-1	\$
Sub-total maintenance Less: cleaning services expenses				
Sub-total Allocation reduction (33%) (B)				
Total maintenance expenses				
Security Expenses: Salaries and wages Fringe benefits Other expenses				
Sub-total security Allocation reduction (67%) (B)				
Total security expenses				
Cleaning Service Expenses				
Utilities expenses				
Total Maintenance, Security, Utilities and Other Related Expenses	<u>\$</u>	<u>\$</u>		<u>\$ 2,355,956</u>

Schedule of Maintenance, Security, Utilities and Other Related Expenses (Cont.) For the Year Ended December 31, 1999

<u>Expenses</u>	(A) Proposed <u>Costs</u>	Auditors' Adjustments and Eliminations	Note <u>No.</u>	Allowable <u>Costs</u>
Allocation of Maintenance, Security, Utilities and Other Related Expenses (<u>C):</u>			
Curatorial Expenses Library Expenses Administrative Expenses Research Department Other Departments				`\
Total Maintenance, Security, Utilities and Other Related Expenses	<u>\$</u>	\$		<u>\$.2,355,956</u>

- (A) The amounts agree with the indirect cost rate proposal submitted by the Missouri Botanical Garden (MBG). The total costs before auditors' adjustments and eliminations agree with MBG's books of account.
- (B) The allocation reductions are for work performed outside of the buildings, which equates to non-research expenses for indirect costs.
- (C) Allocation are based upon the applicable square footage utilized by curatorial, library, administrative and other departments.

MISSOURI BOTANICAL GARDEN Schedule of Depreciation Expenses For the Year Ended December 31, 1999

	<u>Expenses</u>	(A) Proposed <u>Costs</u>	Auditors' Adjustments and Eliminations	Allowable <u>Costs</u>
	Depreciation by MBG Building:			
	Monsanto Research Center	\$	\$	\$
-	Lehmann Building Administration Building			
	Greenhouses			
	Experimental Greenhouse			
	Museum Building			
	Other Depreciation: Furniture & Office Equipment			
	Data Processing Equipment			
	Total Depreciation Expense	\$	\$	<u>\$ 553,662</u>
	Allocation of Depreciation Expense (B):			
	Curatorial Expenses	\$	\$	\$
	Library Expenses			
	Administrative Expenses			
	Research Department Other Departments			
	omer Departments			
	Total Depreciation Expense	<u>\$</u>	<u>\$</u>	<u>\$ 553,662</u>

- (A) The amounts agree with the indirect cost rate proposal submitted by the Missouri Botanical Garden (MBG). The total costs before auditors' adjustments and eliminations agree with MBG's books of account.
- (B) Allocations are based upon square footage for building depreciation and use of asset for all other assets, for curatorial, library, administrative and other departments.

Indirect Cost Calculations For the Year Ended December 31, 2000

<u>Expenses</u>	Proposed <u>Costs</u>	(A) Auditors' Adjustments and Eliminations	Allowable <u>Costs</u>
Direct Cost Base (Research Costs-MTDC)	<u>\$</u>	<u>\$</u>	<u>\$</u>
Indirect Cost Pool: Curatorial Expenses Library Expenses Administrative Expenses (Research Department) Maintenance, Security, Utilities and Other Related Expenses (Research Department) Depreciation Expense (Research Department)	\$	\$	\$
Total Indirect Costs	\$	\$	\$ 1,880,561
Computation of Indirect Cost Rate: On-Site Rate: Total indirect costs Total direct costs	<u>Per MBG</u> \$	Per Audit \$ 1,880,561 \$ 4,535,378	
Computed Indirect Cost Rate (On-Site)	%	41.46%	
Off-Site Rate: Total administrative indirect costs Total direct costs Computed Indirect Cost Rate (Off-Site)	\$% (B)	\$ 784,700 \$ 4,535,378 17.30%	

Note: The audited off-site indirect cost rate could not be determined due to MBG not properly determining off-site direct/indirect costs. MBG merely utilized the administrative indirect cost component of their total indirect cost pool.

- (A) See Schedules B-2a to B-2f for breakdown of adjustments and eliminations.
- (B) MBG indirect cost proposal utilized rounded rate of 17.7%.

See accompanying notes to these financial schedules.

Schedule of Direct Costs For the Year Ended December 31, 2000

<u>Expenses</u>	(A) Proposed <u>Costs</u>	Auditors' Adjustments and Eliminations	Note No.	Allowable <u>Costs</u>
Grants, Contracts and Special Accounts: Salaries and wages	\$	\$	C-2	\$
Fringe benefits	Φ	Ф	C-2	3
Other expenses			C-2	A 2.0
Total Grants, Contracts and Special				
Accounts				
Research Division:				
Salaries and wages				
Fringe benefits				
Other expenses				
Total Research Division				
Scientific Publications:				
Salaries and wages			C-2	
Fringe benefits			C-2	
Other expenses			C-2	
Total Scientific Publications				
Total Direct Costs	<u>\$</u>	<u>\$</u>		<u>\$4,535,378</u>

(A) The amounts agree with the indirect cost rate proposal submitted by the Missouri Botanical Garden (MBG). The total costs before auditors' adjustments and eliminations agree with MBG's books of account, except as noted in the auditors' adjustments and eliminations.

Schedule of Curatorial Expenses For the Year Ended December 31, 2000

<u>Expenses</u>	(A) Proposed Costs	Auditors' Adjustments and Eliminations	Note No.	Allowable <u>Costs</u>
Salaries and wages	\$	\$	C-2	\$ -0-
Fringe benefits			C-2	-0-
Other expenses			C-2	-0-
Greenhouse costs			C-2	-0-
Herbarium Costs:				- 4 -
Salaries and wages			C-2	-0-
Fringe benefits			C-2	-0-
Other expenses			C-2	
Subtotal prior to allocation from other cost centers Administrative Expenses (Schedule B-2d) Maintenance, Security, Utilities and Other Related Expenses (Schedule B-2e) Depreciation expense (Schedule B-2f)			C-2 C-2 C-2 C-2	-0- -0- -0-
Total Curatorial Expenses	<u>\$</u>	\$		<u>\$0</u> -
Curatorial Expenses Allocation Factor (B)	\$ <u>92.3463</u> %	\$ <u>92.3463</u> %		\$ -0- <u>92.3463</u> %
Indirect Cost Pool Curatorial Expenses	<u>\$</u>	<u>\$</u>		<u>\$ -0</u> -

- (A) The amounts agree with the indirect cost rate proposal submitted by the Missouri Botanical Garden (MBG). The total costs before auditors' adjustments and eliminations agree with MBG's books of account, except as noted in the auditors' adjustments and eliminations.
- (B) Allocation based upon a reduction for outside public use of MBG research facilities of 7.6537%. Therefore the actual usage is 92.3463% (100% 7.6537%).
- * The adjustment from the referenced schedule was increased to the total proposed costs due to the elimination of curatorial costs from the indirect cost pool.

See accompanying notes to these financial schedules.

Schedule of Library Expenses For the Year Ended December 31, 2000

		Auditors'		
	(A)	Adjustments		
	Proposed	and	Note	Allowable
<u>Expenses</u>	<u>Costs</u>	<u>Eliminations</u>	<u>No.</u>	<u>Costs</u>
Salaries and wages	\$	\$		\$
Fringe benefits				
Other expenses			C-2	
Subtotal prior to allocation from other cost centers Administrative Expenses (Schedule B-2d)			*	
Maintenance, Security, Utilities and				
Other Related Expenses (Schedule B-2e)			*	
Depreciation expense (Schedule B-2f)			*	
Total Library Expenses	<u>\$</u>	<u>\$</u>		<u>\$ 719,063</u>
Library Expenses	\$	\$		\$ 719,063
Allocation Factor (B)	92.3463%	92.3463%		92.3463%
Indirect Cost Pool Library Expenses	\$	\$		\$ 664,028

- (A) The amounts agree with the indirect cost rate proposal submitted by the Missouri Botanical Garden (MBG). The total costs before auditors' adjustments and eliminations agree with MBG's books of account.
- (B) Allocation based upon a reduction for outside public use of MBG research facilities of 7.6537%. Therefore the actual usage is 92.3463% (100% 7.6537%).

^{*} See allocation adjustment in referenced schedule.

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MISSOURI BOTANICAL GARDEN Schedule of Administrative Expenses For the Year Ended December 31, 2000

<u>Expenses</u>	(A) Proposed <u>Costs</u>	Auditors' Adjustments and Eliminations	Note <u>No.</u>	Allowable <u>Costs</u>
Salaries and wages Fringe benefits	\$	\$		\$
Other expenses			C-2	
Human Resources Management Costs:				
Salaries and wages Fringe benefits				
Other expenses				
Subtotal prior to allocation from other cost centers Maintenance, Security, Utilities and Other Related Expenses (Schedule B-2e) Depreciation expense (Schedule B-2f)			* *	
Total Administrative Expenses	\$	\$		\$ 3,698,465
Allocation of Administrative Expenses (B): Curatorial Expenses Library Expenses Research Department Other Departments	\$	\$ (640)		\$
Total Administrative Expenses	\$	\$		\$ 3,698,465

- (A) The amounts agree with the indirect cost rate proposal submitted by the Missouri Botanical Garden (MBG). The total costs before auditors' adjustments and eliminations agree with MBG's books of account.
- (B) The allocation percentages are based upon the total direct costs of the curatorial, library, research and other departments as a percentage of this total.

See accompanying notes to these financial schedules.

^{*} See allocation adjustment in referenced schedule.

Schedule of Maintenance, Security, Utilities and Other Related Expenses For the Year Ended December 31, 2000

<u>Expenses</u>	(A) Proposed Costs	Auditors' Adjustments and Eliminations	Note No.	Allowable <u>Costs</u>
Maintenance Expenses: Salaries and wages Fringe benefits Other expenses	\$	\$	C-2	\$
Sub-total maintenance Less: cleaning services expenses				
Sub-total Allocation reduction (33%) (B)				
Total maintenance expenses	<u>\$</u>	<u>\$</u>		<u>\$</u>
Security Expenses: Salaries and wages Fringe benefits Other expenses	\$	\$		\$
Sub-total security Allocation reduction (67%) (B)				
Total security expenses				
Cleaning Service Expenses				
Utilities expenses				
Total Maintenance, Security, Utilities and Other Related Expenses	<u>\$</u>	<u>\$</u>		<u>\$ 2,482,255</u>

See accompanying notes to these financial schedules.

Schedule of Maintenance, Security, Utilities and Other Related Expenses (Cont.) For the Year Ended December 31, 2000

<u>Expenses</u>	(A) Proposed <u>Costs</u>	Auditors' Adjustments And Eliminations	Note No.	Allowable <u>Costs</u>
Allocation of Maintenance, Security, Utilities and Other Related Expenses (C):				
Curatorial Expenses Library Expenses	\$	\$		\$ Electric
Administrative Expenses				
Research Department				
Other Departments				
Total Maintenance, Security, Utilities and Other Related Expenses	<u>\$</u>	<u>\$</u>		<u>\$ 2,482,255</u>

- (A) The amounts agree with the indirect cost rate proposal submitted by the Missouri Botanical Garden (MBG). The total costs before auditors' adjustments and eliminations agree with MBG's books of account.
- (B) The allocation reductions are for work performed outside of the buildings, which equates to non-expenses for indirect costs.
- (C) Allocations are based upon the applicable square footage utilized by curatorial, library, administrative and other departments.

Schedule of Depreciation Expenses For the Year Ended December 31, 2000

<u>Expenses</u>	(A) Proposed <u>Costs</u>	Auditors' Adjustments and Eliminations	Note No.	Allowable <u>Costs</u>
Depreciation by MBG Building: Monsanto Research Center	\$	\$		\$
Lehmann Building Administration Building				
Greenhouses Experimental Greenhouse				
Museum Building Other Depreciation:				
Furniture and Office Equipment				
Data Processing Equipment				
Total Depreciation Expense	<u>\$.</u>	<u>\$</u>	C-2	<u>\$</u>
Allocation of Depreciation Expense (B):				
Curatorial Expenses	\$	\$		\$
Library Expenses				
Administrative Expenses Research Department				
Other Departments				
Total Depreciation Expense	<u>\$ 523,048</u>	<u>\$</u>		<u>\$ 490,313</u>

- (A) The amounts agree with the indirect cost rate proposal submitted by the Missouri Botanical Garden (MBG). The total costs before auditors' adjustments and eliminations agree with MBG's books of account, except as noted in the auditors' adjustments and eliminations.
- (B) Allocations are based upon square footage for building depreciation and use of asset for all other assets, for curatorial, library, administrative and other departments.

Schedule of Auditors' Adjustments and Eliminations For the years ended December 31, 1999 and 2000

The amounts as proposed by MBG in their indirect cost proposals for the years ended December 31, 1999 and 2000 (Schedules B-1 and B-2) required various adjustments and eliminations to the indirect cost or direct cost pools. These adjustments and/or eliminations are presented in Schedules B-1 and B-2. On the following pages in Schedules C-1 and C-2 these adjustments and/or eliminations are detailed. Presented below is a brief summary of the type of adjustment and/or elimination along with the relevant criteria.

Adjustment and/or Elimination

Criteria

To eliminate curatorial costs.

Per the MBG Mission Statement, Curatorial costs are directly related to the mission of MBG and should not be treated as or included in the indirect costs pool.

Adjust costs per indirect cost proposal to agree with General Ledger.

OMB Circular A-110, Subpart C, paragraph H 21(b)(1) requires accurate, current and complete disclosure of the financial results of each federally sponsored project or program.

Fixed assets (equipment and capital expenditures) included in the direct and indirect cost pools.

OMB Circular A - 122, Attachment A, PartD(3)69 states that equipment, capital expenditures and the portion of subcontracts in excess of \$25,000 shall be excluded from modified total direct costs.

Missing or inadequate source documentation in the form of a vendor invoice. Without the vendor invoice determination of the allowability of the cost cannot be determined. OMB Circular A-110, Subpart C, paragraph 21 (b) (7) requires accounting records that are supported by source documentation.

The cost of alcoholic beverages that were included in indirect and direct costs.

OMB Circular A-122, Attachment B, item 2, states that the costs of alcoholic beverages are unallowable.

The cost of business-class airfares that were included in indirect costs.

OMB Circular A-122, Attachment B, Item 55(c), states that the difference in cost between first-class (business-class) air accommodations and less than first-class (business-class) air accommodations is unallowable except when less than first-class (business-class) are not reasonably available to meet necessary mission requirements.

Schedule of Auditors' Adjustments and Eliminations (Cont.) For the years ended December 31, 1999 and 2000

Auditee's Response

(A) To eliminate curatorial costs:

The Garden believes these costs should be restored. Pleas see the Garden's response and rationale to Material Weakness Point 2 above.

(B) Adjust costs to agree with general ledger:

Attributed to clerical errors made during the rate data compilation process.

(C) Fixed assets included in direct and indirect cost pools:

For financial reporting purposes, the Garden records as fixed assets, those items in excess of \$15,000. Due to an oversight, items between \$5,000 and \$15,000 were not reclassified out of the cost pools when the rate was calculated. Future rate calculations will include the necessary adjustments to exclude these items.

(D) Missing vendor invoices:

During the audit process, the staff were unable to find several misfiled documents. A subsequent search did locate a number of the misfiled documents, and copies are attached for audit purposes.

(E) The cost of alcoholic beverages were included in the cost pool:

Due to a clerical oversight, certain out-of-town meal costs including alcohol were misclassified as travel. Procedures now include a step to review such costs to ensure alcohol is not included the rate calculation.

(F) The cost of business class airfares were included in the cost pool:

The Garden's employee handbook directs that economy fares be used. However, in rare cases, business class is used to accommodate schedule and destination requirements. It is the intention of the Garden to remove these types of costs from the calculation, but, due to an oversight, the identified business class fares were not eliminated from the calculation.

Schedule of Auditors' Adjustments and Eliminations (Cont.) For the years ended December 31, 1999 and 2000

Auditors' Response to Auditee's Response

(A):

MBG's exception to the exclusion of curatorial costs and our response was previously discussed in Findings and Recommendations on Internal Control, Finding Number 2. The amount remains as stated.

(B), (C), (E) & (F):

MBG concurs with our adjustments and eliminations, therefore, the amounts remain as stated.

MBG provided documentation for FYI 999 to support \$6,380 of administrative expenses and \$5,700 of maintenance expenses. No additional documentation was provided for FY1999 or FY2000. As a result of the documentation provided the audited on-site indirect cost rate for FY1999 increased from 41.99% to 42.03%. The audited off-site indirect cost rate for FYI 999 increased from 18.52% to 18.56%. Due to the immaterial changes in these rates, we have not adjusted the schedules in this report to reflect these changes.

Schedule of Auditors' Adjustments and Eliminations For the year ended December 31, 1999

						Other Expenses	
Adjustment and Elimination Explanation	Total Amount	Curatorial Costs	Direct Salaries and Wages	Direct Fringe Benefits	Direct	Administrative	Maintenance, Etc.
To eliminate curatorial costs associated with MBG mission statement.	\$ (2,213,930)	\$ (2,213,930)	S	\$	\$	\$	\$
To adjust indirect cost proposal per final costs per books of account.	96,035		(74,411)	(19,498)	189,944		
Fixed assets and subcontracts not previously eliminated by MBG.	(99,551)				(98,087)		(1,464)
Missing documentation (vendor invoice not available or insufficient detail provided).	(25,050)					(6,380) (A)	(18,670)(B)
Alcoholic beverages costs included in the indirect cost pool.	(138)					(138)	
Totals	\$ (2,242,634)	\$-(2,213,930)	x(74.411)	\$(19,498)	\$ 91,857	S(6,519)	\$(20,13 4)
Direct Salaries and Wages, Fringe Benefits and Other Expenses Recap: Grants, Contracts and Special Accts. Scientific Publications	\$		\$	\$	\$		
Totals	<u>\$ (2,052)</u>		<u>\$ (74,411)</u>	<u>\$ (19,498</u>)	<u>\$ 91,857</u>		

- (A) Documentation provided by MBG with their response to the draft report.
- (B) Documentation for \$5,700 provided by MBG with their response to the draft report.

Schedule of Auditors' Adjustments and Eliminations For the year ended December 31, 2000

							p+		
Adjustment and Elimination Explanation	Total Amount	Curatorial Costs	Salaries and Wages	Fringe Benefits	Direct	Library	Administrative	Maintenance, Etc.	Depreciation
For eliminate curatorial costs associated with MBG mission statements	\$ (2,150,998)	\$ (2,150,998)	\$	\$	\$	\$	\$	\$	\$
Fo adjust indirect cost proposal per final costs per books of account.	121,588		19,155	6,964	128,204				(32,735)
Fixed assets and subcontracts not previously eliminated by MBG.	(144,601)				(75,095)			(69,506)	
Vissing documentation (vendor invoice not available or insufficient detail provided).	(6,903)					(890)	(3,816)	(2,197)	
Business class airfares (non-coach) included in the indirect cost pool.	(21,761)						(21,761)		
Totals	<u>\$ (2,202,675)</u>	<u>\$ (2,150,998)</u>	<u>\$ 19,155</u>	<u>\$_6,964</u>	\$ 53,109	<u>\$ (890)</u>	<u>\$ (25,577)</u>	<u>\$ (71,703)</u>	<u>\$ (32,735)</u>
Other Expenses Recap: Grants, Contracts & Special Accts.	\$		\$	\$	\$				
Scientific Publications									
Totals	\$ 79,228		<u>\$ 19,155</u>	<u>\$ 6,964</u>	<u>\$ 53,109</u>				

Notes to Financial Schedules For the years ended December 31, 1999 and 2000

1. Summary of Significant Accounting Policies:

The accompanying financial schedules have been prepared in conformity with National Science Foundation (NSF) instructions. Schedules B-1 and B-2 have been prepared from the indirect cost proposals prepared by the Missouri Botanical Garden and Schedule A, has been prepared based upon the results of the audit of Schedules B-1 and B-2. The schedules do not present the complete financial position of the Missouri Botanical Garden. In accordance with NSF instructions, there are no schedules of financial position, statement of activities or statement of cash flows.

2. Income Taxes:

The Missouri Botanical Garden is a private nonprofit charitable trust. The Missouri Botanical Garden is exempt from income taxes under Section 501(c)(3) of the Internal Revenue Code. It is also exempt from State of Missouri income tax.

SECTION IV SUPPLEMENTARY INFORMATION

National Science Foundation Office of Inspector General 4201 Wilson Boulevard Arlington, Virginia 22230

INDEPENDENT AUDITORS' REPORT ON SUPPLEMENTARY INFORMATION

Our report on our audit of the schedule of over/(under) recovered indirect costs and schedules of indirect and direct costs (the basic financial schedules) of the Missouri Botanical Garden for the years ended December 31, 1999 and 2000, appears in Schedule A and Schedules B-1 and B-2. The audit was made for the purpose of forming an opinion on the basic financial schedules taken as a whole. The supplementary information presented in Schedules D-1 to D-14 and Schedule E are presented for purposes of supplementary analysis and are not a required part of the basic financial schedules. The supplementary information has not been subjected to the auditing procedures applied in the audit of the basic financial schedules and, accordingly, we express no opinion on them.

M.D. Oggenheim & Company, P.C.

June 7, 2002

Schedule D-1

National Science Foundation Award Number DEB-9307063

Awarded To MISSOURI BOTANICAL GARDEN

Schedule of Over (Under) Recovered Indirect Costs

For the Period January 1, 1999 to June 30, 1999 (A) Final

(Unaudited)

Cost Category	FYE <u>12/31/99</u>	
Personnel costs Equipment Participant support costs	 \$	
Subaward costs Other direct costs		
Total direct costs Exclusions: Equipment Participant support		(B)
Subawards > than \$25,000 Modified total direct cost (MTDC) base	\$ 14.424	

Breakdown of MTDC by On-Site and Off-Site/Calculation of Indirect Costs (I/C):

	FYE 12/31/99			
	On-Site	Off-Site (D)	Total	
Total MTDC Rate per I/C Audit	\$ 9,035 _41.99%	\$ 5,389 18.52%	\$ 14,424 ———	
Calculated I/C per audit Claimed indirect (C)	3,794 5,810	998 738	\$ 4,792 6,548	(B)
Over/(Under) recovered I/C	<u>\$ 2,016</u>	<u>\$ (260)</u>	<u>\$ 1,756</u>	

EVE

41.99%

18.52%

National Science Foundation Award Number DEB-9307063

Awarded To

MISSOURI BOTANICAL GARDEN

Schedule of Over (Under) Recovered Indirect Costs (Cont.)
For the Period January 1, 1999 to June 30, 1999 (A)
Final
(Unaudited)

Cost Category	12/31/99
Indirect Cost Rates:	
Rate Per Award/ On-Site (**) Rate Per Award/ Off-Site (**)	
Rate Billed to NSF/On-Site Rate Billed to NSF/Off-Site	64.30% 13.70%
Rate Per Negotiated Agreement/On-Site Rate Per Negotiated Agreement/Off-Site	84.00% 14.80%
Rate per Indirect Cost Proposal/On-Site Rate per Indirect Cost Proposal/Off-Site	

(A) The award period is January 15,1994 to June 30, 1999.

Rate Per Audit/On-Site

Rate Per Audit/Off-Site

- (B) The total direct costs plus the claimed indirect costs total \$21,068 for the period January 1, 1999 to June 30, 1999. This amount, added to the cumulative costs of \$83,932 at December 31, 1998, agrees with the cumulative net disbursements on the FCTR as of the quarter ended June 30, 1999.
- (C) Indirect costs were based upon the rate specified above as "Rate Billed to NSF."
- (**) Award letter does not have approved rates. Rates per MBG proposed budget.

National Science Foundation Award Number DEB-9420140 Awarded To

MISSOURI BOTANICAL GARDEN

Schedule of Over (Under) Recovered Indirect Costs For the Period January 1, 1999 to March 31, 2000 (A) Final (Unaudited)

Cost Category	FYE <u>12/31/99</u>
Personnel costs Equipment	\$
Participant support costs	
Subaward costs	
Other direct costs	
Total direct costs	(B) (D)
Exclusions:	
Equipment	
Participant support	
Subawards > than \$25,000	
Modified total direct cost (MTDC) base	<u>\$ 11,753</u>

Breakdown of MTDC by On-Site and Off-Site/Calculation of Indirect Costs (I/C):

	FYE 12/31/99			
	On-Site	Off-Site	_Total_	
Total MTDC Rate per I/C Audit	\$ 11,753 41.99%	\$ N/A	<u>\$ 11,753</u>	
Calculated I/C per audit Claimed indirect (C)	4,935 		\$ 4,935 <u>7,945</u>	(B) (D)
Over/(Under) recovered I/C	\$ 3,010	<u>\$ -0</u> -	<u>\$ 3,010</u>	

National Science Foundation Award Number DEB-9420140 Awarded To

MISSOURI BOTANICAL GARDEN

Schedule of Over (Under) Recovered Indirect Costs (Cont.)
For the Period January 1, 1999 to March 31, 2000 (A)
Final
(Unaudited)

Cost Category	FYE <u>12/3</u> 1/99
Indirect Cost Rates: Rate Per Award/ On-Site Rate Per Award/ Off-Site	
Rate Billed to NSF/On-Site Rate Billed to NSF/Off-Site	67.60% N/A
Rate Per Negotiated Agreement/On-Site Rate Per Negotiated Agreement/Off-Site	_84.00% N/A
Rate per Indirect Cost Proposal/On-Site Rate per Indirect Cost Proposal/Off-Site	
Rate Per Audit/On-Site Rate Per Audit/Off-Site	41.99% N/A

- (A) The award period is April 1, 1995 to March 31, 2000.
- (B) The total direct costs plus the claimed indirect costs total \$22,649 for the period January 1, 1999 to December 31, 1999. This amount, added to the cumulative costs of \$52,351 at December 31, 1998, agrees with the cumulative net disbursements on the FCTR as of the quarter ended March 31, 2000
- (C) Indirect costs were based upon the rate specified above as "Rate Billed to NSF."
- (D) MBG did not claim direct or indirect costs for the period January 1, 2000 to March 31, 2000.

Schedule D-3

National Science Foundation Award Number DEB-9522034 Awarded To

MISSOURI BOTANICAL GARDEN

Schedule of Over (Under) Recovered Indirect Costs For the Period January 1, 1999 to March 31, 2000 (A) Final (Unaudited)

Cost Category	FYE <u>12/31/99</u>	FYE <u>12/31/00</u>	<u>Total</u>
Personnel costs	\$	\$	\$
Equipment Participant support costs			
Subaward costs			_
Other direct costs			
Total direct costs	120,435	112,063	<u>\$ 232,498</u>
Exclusions:			(B)
Equipment			
Participant support	(59,571)	(55,435)	
Subawards > than \$25,000			
Modified total direct cost (MTDC) base	<u>\$ 60,864</u>	\$ 56,628	

Breakdown of MTDC by On-Site and Off-Site/Calculation of Indirect Costs (I/C):

	FYE 12/31/99	FYE 12/31/00	Total	
	On-Site Off-Site (D)	On-Site Off-Site (D)	<u>1999</u> <u>2000</u>	
Total MTDC Rate per I/C Audit	\$ 28,265		\$ 60,864 \$ 56,62	<u>8</u>
Calculated I/C per audit Claimed indirect (C)	11,868 6,037 18,175 4,466	21,461 842 5 33,283 667	\$ 17,905 \$ 22,300 22,641 33,950	0 \$ 56,591
Over/(Under) recovered I/C	<u>\$ 6,307</u>	<u>\$ 11,822</u>	<u>\$ 4,736 </u>	(B)

National Science Foundation Award Number DEB-9522034 Awarded To

MISSOURI BOTANICAL GARDEN

Schedule of Over (Under) Recovered Indirect Costs (Cont.)
For the Period January 1, 1999 to March 31, 2000 (A)
Final
(Unaudited)

Cost Category	FYE <u>12/31/99</u>	FYE 12/31/00
Indirect Cost Rates:		
Rate Per Award/ On-Site (**)		
Rate Per Award/ Off-Site (**)		
Rate Billed to NSF/On-Site	64.30%	64.30%
Rate Billed to NSF/Off-Site	13.70%	13.70%
Rate Per Negotiated Agreement/On-Site	84.00%	84.00%
Rate Per Negotiated Agreement/Off-Site	14.80%	14.80%
Rate per Indirect Cost Proposal/On-Site		
Rate per Indirect Cost Proposal/Off-Site		
Rate Per Audit/On-Site	41.99%	41.46%
Rate Per Audit/Off-Site	18.52%	17.30%

- (A) The award period is September 1, 1995 to August 31, 2002.
- (B) The total direct costs plus the claimed indirect costs total \$289,089 for the period January 1, 1999 to December 31, 2000. This amount, added to the cumulative costs of \$341,169 at December 31, 1998, agrees with the cumulative net disbursements reported on the FCTR as of the quarter ended December 31, 2000.
- (C) Indirect costs were based upon the rate specified above as "Rate Billed to NSF."
- (**) Award letter does not have approved rates. Rates per MBG proposed budget.

Schedule D-4

National Science Foundation Award Number DEB-9525938 Awarded To

MISSOURI BOTANICAL GARDEN

Schedule of Over (Under) Recovered Indirect Costs
For the Period January 1, 1999 to December 31, 2000 (A)
Final
(Unaudited)

Cost Category					FYE <u>12/31/99</u>	FYE 12/31/00	Total
Personnel costs Equipment Participant support costs Subaward costs					\$	\$	\$
Other direct costs							
Total direct costs Exclusions:					11,452	14,917	\$26,369 (B)
Equipment Participant support						(8,732)	,
Subawards > than \$25,000	G) I						
Modified total direct cost (MTD) Breakdown of MTDC by On-Sit	•	ite/Calculation	of Indina	t Coata (I/C).	<u>\$ 11,452</u>	<u>\$ 6,185</u>	
Dicardown of Wilde by Oil-Sit	c and On- <u>s</u>	<u>ite/Calculation</u>	i oi manec	i Cosis (I/C):			
	FYE On-Site	12/31/99 Off-Site (D)		12/31/00 Off-Site (D)	To	otal 2000	
Total MTDC Rate per I/C Audit	\$ 9,033 _41.99 %	\$ 2,419 2 18.52%	\$ 2,185 41.46%	\$ 4,000 17.30%	<u>\$ 11,452</u>	<u>\$ 6,185</u>	
Calculated I/C per audit Claimed indirect (C)	3,793 5,809	448 331	906 305	692 548	\$ 4,241 6,140	\$ 1,598 853	\$ 6,993 (B)
Over/(Under) recovered I/C	\$ 2,016	<u>\$ (117)</u>	<u>\$ (601)</u>	<u>\$ (144)</u>	<u>\$ 1,899</u>	<u>\$ (745)</u>	(1)

(D)

National Science Foundation Award Number DEB-9525938 Awarded To

MISSOURI BOTANICAL GARDEN

Schedule of Over (Under) Recovered Indirect Costs (Cont.)
For the Period January 1, 1999 to December 31, 2000 (A)
Final
(Unaudited)

Cost Category	FYE <u>12/31/99</u>	FYE 12/31/00	_Total_
Indirect Cost Rates:			
Rate Per Award/ On-Site	64.30%	64.30%	
Rate Per Award/ Off-Site	13.70%	13.70%	
Rate Billed to NSF/On-Site	<u>64.30%</u>	64.30%	
Rate Billed to NSF/Off-Site	13.70%	13.70%	
Rate Per Negotiated Agreement/On-Site	84.00%	84.00%	
Rate Per Negotiated Agreement/Off-Site	14.80%	14.80%	
Rate per Indirect Cost Proposal/On-Site			
Rate per Indirect Cost Proposal/Off-Site			
Rate Per Audit/On-Site	41.99%	41.46%	
Rate Per Audit/Off-Site	18.52%	17.30%	

- (A) The award period is February 1, 1996 to December 31, 2000.
- (B) The total direct costs plus the claimed indirect costs total \$33,362 for the period January 1, 1999 to December 31, 2000. This amount, added to the cumulative costs of \$36,848 at December 31, 1998, agrees with the cumulative net disbursements reported on the FCTR as of the quarter ended December 31, 2000.
- (C) Indirect costs were based upon the rate specified above as "Rate Billed to NSF."
- (D) Under recovered indirect costs cannot be recovered on this award since the award is closed and the total costs (direct and indirect) were billed up to the budget maximum.

Schedule D-5

National Science Foundation Award Number DEB-9627072 Awarded To

MISSOURI BOTANICAL GARDEN

Schedule of Over (Under) Recovered Indirect Costs For the Period January 1, 1999 to February 28, 2000 (A) Final (Unaudited)

Cost Category					FYE 12/31/99	FYE 12/31/00	<u>Total</u>
Personnel costs Equipment					\$	\$	\$
Participant support costs							
Subaward costs Other direct costs							_
Other direct costs							
Total direct costs Exclusions:					48,700	20,552	\$ 69,252
Equipment					(107)		(B)
Participant support					(101)		
Subawards > than \$25,000							
Modified total direct cost (MTD	C) base				\$ 48,593	\$ 20,552	
Breakdown of MTDC by On-Sit	e and Off-Site/	Calculation of	Indirect Co	sts (I/C):			
	FYE 12			2/31/00	То		
	<u>On-Site</u>	Off-Site (D)	On-Site	Off-Site (D)	<u>1999</u>	<u>2000</u>	
Total MTDC	\$ 28,001	\$ 20,592	\$ 9,561	\$ 10,991	\$ 48,593	\$ 20,552	
Rate per I/C Audit	<u>41.99</u> %	<u> 18.52</u> %	<u>41.46</u> %		<u> </u>	<u>~</u>	
Calculated I/C per audit (D) Claimed indirect (C)	11,758	3,814	3,964	1,901	\$ 15,572	\$ 5,865	A 4 5 054
Claimed indirect (C)	<u>13,050</u>	<u>2,821</u>		0-	<u>_15,871</u>	0-	\$ 15,871 (B)
Over/(Under) recovered I/C	<u>\$ 1,292</u>	<u>\$(993)</u>	\$ <u>(3,964)</u> (E)	<u>\$ (1,901)</u> (E)	<u>\$ 299</u>	\$ (5,865) (D)	(D)
			(2)	(2)		(1)	

National Science Foundation Award Number DEB-9627072 Awarded To

MISSOURI BOTANICAL GARDEN

Schedule of Over (Under) Recovered Indirect Costs (Cont.) For the Period January 1, 1999 to February 28, 2000 (A) Final (Unaudited)

Cost Category	FYE 12/31/99	FYE 12/31/00
Indirect Cost Rates:		
Rate Per Award/ On-Site	64.30%	64.30%
Rate Per Award/ Off-Site	13.70%	13.70%
Rate Billed to NSF/On-Site	64.30%	64.30%
Rate Billed to NSF/Off-Site	13.70%	13.70%
Rate Per Negotiated Agreement/On-Site	84.00%	84.00%
Rate Per Negotiated Agreement/Off-Site	14.80%	14.80%
Rate per Indirect Cost Proposal/On-Site		
Rate per Indirect Cost Proposal/Off-Site		
Rate Per Audit/On-Site	41.99 %	41.46%
Rate Per Audit/Off-Site	18.52%	17.30%

- (A) The award period is September 1, 1996 to February 28, 2000.
- (B) The total direct costs plus the claimed indirect costs total \$85,123 for the period January 1, 1999 to February 28, 2000. This amount, added to the cumulative costs of \$182,912 at December 31, 1998, agrees with the cumulative net disbursements reported on the FCTR as of the quarter ended June 30, 2000.
- (C) Indirect costs were based upon the rate specified above as "Rate Billed to NSF."
- (D) Under recovered indirect costs cannot be recovered on this award since the award is closed and the total costs (direct and indirect) were billed up to the budget maximum.
- (E) No indirect costs claimed for 2000, direct costs utilized funds up to the budget maximum.

Schedule D-6

National Science Foundation Award Number DEB-9626747 Awarded To

MISSOURI BOTANICAL GARDEN

Schedule of Over (Under) Recovered Indirect Costs
For the Period January 1, 1999 to December 31, 2000 (A)
Interim
(Unaudited)

Cost Category					FYE 12/31/99	FYE 12/31/00	<u>Total</u>
Personnel costs					\$	\$	\$
Equipment							
Participant support costs							
Subaward costs							
Other direct costs							
Total direct costs					23,990	19,485	\$ 43,475
Exclusions:							(B)
Equipment					(257)	(249)	. ,
Participant support						, ,	
Subawards > than \$25,000							
Modified total direct cost (MTDC	C) base				\$ 23,733	<u>\$ 19,236</u>	
Breakdown of MTDC by On-Site	and Off-Site/Ca	alculation of	Indirect Co	sts (I/C):			
	FYE 12/3	1/99	FYE 1	2/31/00	To	tal	
	On-Site O	ff-Site (D)	On-Site	Off-Site (D)	1999	2000	
Total MTDC	\$ 14,561	\$ 9,172	\$ 11,691	\$ 7,545	\$ 23,733	\$ 19,236	
Rate per I/C Audit	<u>41.99</u> %	<u>18.52</u> %	<u>41.46</u> %	<u>17.30</u> %			
Calculated I/C per audit	6,114	1,699	4,847	1,305	\$ 7,813	\$ 6,152	
Claimed indirect (C)	9,362	1,257	<u>7,517</u>	1,034	10,619	<u>8,551</u>	\$ 19,170

\$ (442) \$ 2,670

<u>\$_(271)</u>

\$ 2,806

\$ 2,399

Over/(Under) recovered I/C

\$ 3,248

(B)

National Science Foundation Award Number DEB-9626747 Awarded To

MISSOURI BOTANICAL GARDEN

Schedule of Over (Under) Recovered Indirect Costs (Cont.) For the Period January 1, 1999 to December 31, 2000 (A) Interim (Unaudited)

Cost Category	FYE <u>12/31/99</u>	FYE 12/31/00
Indirect Cost Rates: Rate Per Award/ On-Site (**) Rate Per Award/ Off-Site (**)		
Rate Billed to NSF/On-Site Rate Billed to NSF/Off-Site	64.30% 13.70%	64.30% 13.70%
Rate Per Negotiated Agreement/On-Site Rate Per Negotiated Agreement/Off-Site	84.00% 14.80%	84.00% 14.80%
Rate per Indirect Cost Proposal/On-Site Rate per Indirect Cost Proposal/Off-Site		
Rate Per Audit/On-Site Rate Per Audit/Off-Site	41.99 % 18.52%	41.46% 17.30%

- (A) The award period is September 15, 1996 to August 31, 2002.
- (B) The total direct costs plus the claimed indirect costs total \$62,645 for the period January 1, 1999 to December 31, 2000. This amount, added to the cumulative costs of \$47,462 at December 31, 1998, agrees with the cumulative net disbursements reported on the FCTR as of the quarter ended December 31, 2000.
- (C) Indirect costs were based upon the rate specified above as "Rate Billed to NSF."
- (**) Award letter does not have approved rates. Rates per MBG proposed budget.

National Science Foundation Award Number DEB-9626806 Awarded To

MISSOURI BOTANICAL GARDEN

Schedule of Over (Under) Recovered Indirect Costs
For the Period January 1, 1999 to September 30, 1999 (A)
Final
(Unaudited)

Cost Category	FYE 12/31/99
Personnel costs Equipment Participant support costs Subaward costs	\$
Other direct costs	
Total direct costs Exclusions: Equipment Participant support Subawards > than \$25,000	177,211 (B) (11,898)
Modified total direct cost (MTDC) base	<u>\$ 165,313</u>

Breakdown of MTDC by On-Site and Off-Site/Calculation of Indirect Costs (I/C):

	FYE 12/31/99				
	On-Site	Off-Site	Total		
Total MTDC	\$ 165,313	\$	\$ 165,313		
Rate per I/C Audit	41.99%	N/A			
Calculated I/C per audit	69,415		\$ 69,415		
Claimed indirect (C)	8,099		8,099 (B)		
Over/(Under) recovered I/C	\$ (61,316)	\$ -0-	\$ (61,3 l) (D)		

National Science Foundation Award Number DEB-9626806 Awarded To

MISSOURI BOTANICAL GARDEN

Schedule of Over (Under) Recovered Indirect Costs (Cont.) For the Period January 1, 1999 to September 30, 1999 (A) Final (Unaudited)

Cost Category	FYE <u>12/31/99</u>
Indirect Cost Rates:	
Rate Per Award/ On-Site (**)	
Rate Per Award/ Off-Site (**)	N/A
Rate Billed to NSF/On-Site	<u>64.30%</u>
Rate Billed to NSF/Off-Site	N/A
Rate Per Negotiated Agreement/On-Site	84.00%
Rate Per Negotiated Agreement/Off-Site	N/A
Rate per Indirect Cost Proposal/On-Site	
Rate per Indirect Cost Proposal/Off-Site	
Rate Per Audit/On-Site	41.99%
Rate Per Audit/Off-Site	N/A

- (A) The award period is October 1, 1996 to September 30, 1999.
- (B) The total direct costs plus the claimed indirect costs total \$185,310 for the period January 1, 1999 to September 30, 1999. This amount, added to the cumulative costs of \$391,070 at December 31, 1998, agrees with the cumulative net disbursements on the FCTR as of the quarter ended September 30, 1999.
- (C) Indirect costs were based upon the rate specified above as "Rate Billed to NSF."
- (D) Under recovered indirect costs cannot be recovered on this award since the award is closed, and the total costs (direct and indirect) were billed up to the budget maximum.
- (**) Award letter does not have approved rates. Rates per MBG proposed budget.

Schedule D-8

National Science Foundation Award Number DEB-9870231 Awarded To

MISSOURI BOTANICAL GARDEN

Schedule of Over (Under) Recovered Indirect Costs For the Period January 1, 1999 to December 31, 2000 (A) Interim (Unaudited)

Cost Category					FYE 12/31/99	FYE 12/31/00	<u>Total</u>
Personnel costs					\$	\$	\$
Equipment							
Participant support costs							
Subaward costs						<u> </u>	
Other direct costs							
Total direct costs					42,239	79,630	<u>\$ 121,869</u>
Exclusions:							(B)
Equipment					(3,459)	(6,933)	
Participant support					(8,775)	(10,362)	
Subawards > than \$25,000							
Modified total direct cost (MTDC) base				\$ 30,005	\$ 62,335	
Breakdown of MTDC by On-Site	and Off-Site/	Calculation of	Indirect Cos	ts (I/C):			
	FYE 12	2/31/99	FYE 12	2/31/00	Tot	al	
	On-Site	Off-Site (D)	On-Site	Off-Site (D)	1999	2000	
Total MTDC	\$ 11,594	\$ 18,411	\$ 13,457	\$ 48,878	\$ 30,005	\$ 62,335	
Rate per I/C Audit	<u>41.99</u> %	<u>18.52</u> %	<u>41.46</u> %	<u>17.30</u> %			
Calculated I/C per audit	4,868	3,410	5,579	8,456	\$ 8,278	\$ 14,035	
Claimed indirect (C)	<u>7,838</u>	<u>2,559</u>	<u>9,097</u>	6,794	_10,397	15,891	\$ 26,288
Over/(Under) recovered I/C	\$ 2.970	\$ (851)	\$ 3.518	\$ (1.662)	\$ 2.119	\$ 1.856	(B)

National Science Foundation Award Number DEB-9870231 Awarded To

MISSOURI BOTANICAL GARDEN

Schedule of Over (Under) Recovered Indirect Costs (Cont.)
For the Period January 1, 1999 to December 31, 2000 (A)
Interim
(Unaudited)

Indirect Cost Rates:	FYE 12/31/99	FYE 12/31/00
Rate Per Award/ On-Site (**) Rate Per Award/ Off-Site (**)		
Rate Billed to NSF/On-Site Rate Billed to NSF/Off-Site	67.60% 13.90%	67.60% 13.90%
Rate Per Negotiated Agreement/On-Site Rate Per Negotiated Agreement/Off-Site	84.00% 14.80%	84.00% 14.80%
Rate per Indirect Cost Proposal/On-Site Rate per Indirect Cost Proposal/Off-Site		
Rate Per Audit/On-Site Rate Per Audit/Off-Site	41.99% 18.52%	41.46% 17.30%

- (A) The award period is August 15, 1998 to July 31, 2001.
- (B) The total direct costs plus the claimed indirect costs total \$148,157 for the period January 1, 1999 to December 31, 2000. This amount, added to the cumulative costs of \$9,571 at December 31, 1998, agrees with the cumulative net disbursements reported on the FCTR as of the quarter ended December 31, 2000.
- (C) Indirect costs were based upon the rate specified above as "Rate Billed to NSF."
- (**) Award letter does not have approved rates. Rates per MBG proposed budget.

Schedule D-9

National Science Foundation Award Number DEB-9870694 Awarded To

MISSOURI BOTANICAL GARDEN

Schedule of Over (Under) Recovered Indirect Costs For the Period January 1, 1999 to December 31, 2000 (A) Interim (Unaudited)

Cost Category			FYE <u>12/31/99</u>	FYE 12/31/00	<u>Total</u>
Personnel costs			\$	\$	\$
Equipment					
Participant support costs					
Subaward costs					
Other direct costs					
Total direct costs			5,389	48,628	<u>\$ 54,017</u>
Exclusions:					(B)
Equipment					
Participant support			(3,740)		
Subawards > than \$25,000			-		
Modified total direct cost (MTDC) ba	ese		<u>\$ 1,649</u>	\$ 48,628	
Breakdown of MTDC by On-Site and	Off-Site/Calculation	of Indirect Costs (I/C):			
	FVF 12/31/99	FVF 12/31/00	T	stal .	

	FYE 12/	31/99	FYE 1	2/31/00	T	<u>`otal</u>	
	On-Site C	Off-Site (D)	On-Site	Off-Site (D)	<u> 1999</u>	_2000_	
Total MTDC Rate per I/C Audit	\$ 680 _41.99%	\$ 969 18.52 %	\$ 41,790 41.46%		<u>\$_1,649</u>	<u>\$ 48,628</u>	
Calculated I/C per audit Claimed indirect (C)	286 460	179 135	17,326 28,251	1,183 950	\$ 465 595	\$ 18,509 29,201	\$ 29,796 (B)
Over/(Under) recovered I/C	<u>\$ 174</u>	<u>\$ (44)</u>	\$ 10,925	\$ (233)	<u>\$ 130</u>	\$ 10,692	(13)

National Science Foundation Award Number DEB-9870694 Awarded To

MISSOURI BOTANICAL GARDEN

Schedule of Over (Under) Recovered Indirect Costs (Cont.)
For the Period January 1, 1999 to December 31, 2000 (A)
Interim
(Unaudited)

Cost Category	FYE 12/31/99	FYE 12/31/00	Total
Indirect Cost Rates: Rate Per Award/ On-Site (**) Rate Per Award/ Off-Site (**)	(D)	_(D)	
Rate Billed to NSF/On-Site Rate Billed to NSF/Off-Site	67.60% 13.90%	67.60% 13.90%	
Rate Per Negotiated Agreement/On-Site Rate Per Negotiated Agreement/Off-Site	84.00% 14.80%	84.00% 14.80%	
Rate per Indirect Cost Proposal/On-Site Rate per Indirect Cost Proposal/Off-Site			
Rate Per Audit/On-Site Rate Per Audit/Off-Site	41.99% 18.52%	41.46% 17.30%	

- (A) The award period is September 15, 1998 to August 31, 2001.
- (B) The total direct costs plus the claimed indirect costs total \$83,813 for the period January 1, 1999 to December 31, 2000 agrees with the cumulative net disbursements reported on the FCTR as of the quarter ended December 31, 2000.
- (C) Indirect costs were based upon the rate specified above as "Rate Billed to NSF."
- (D) The MBG award budget did not list an off-site rate for this award.
- (**) Award letter does not have approved rates. Rates per MBG proposed budget.

National Science Foundation Award Number DEB-9981642 Awarded To

MISSOURI BOTANICAL GARDEN

Schedule of Over (Under) Recovered Indirect Costs
For the Period March 1, 2000 to December 31, 2000 (A)
Interim
(Unaudited)

Cost Category	FYE 12/31/00
Personnel costs	\$
Equipment	
Participant support costs	
Subaward costs	
Other direct costs	
Total direct costs	12,082 (B)
Exclusions:	
Equipment	
Participant support	(4,410)
Subawards > than \$25,000	
Modified total direct cost (MTDC) base	<u>\$ 7,672</u>

Breakdown of MTDC by On-Site and Off-Site/Calculation of Indirect Costs (I/C):

	FYE 12/31/00		
	On-Site	Off-Site	Total
Total MTDC	\$ 7,672	\$	\$ 7,672
Rate per I/C Audit	41.46%	N/A	
Calculated VC per audit	3,181		\$ 3,181
Claimed indirect (C)	5,340		5,340 (B)
Over/(Under) recovered I/C	\$ 2,159	\$ -0-	\$ 2,159

National Science Foundation Award Number DEB-9981642 Awarded To

MISSOURI BOTANICAL GARDEN

Schedule of Over (Under) Recovered Indirect Costs (Cont.)
For the Period March 1, 2000 to December 31, 2000 (A)
Interim
(Unaudited)

Cost Category	FYE 12/31/00
Indirect Cost Rates: Rate Per Award/ On-Site (**) Rate Per Award/ Off-Site (**)	<u>N/A</u>
Rate Billed to NSF/On-Site Rate Billed to NSF/Off-Site	69.60% _N/A
Rate Per Negotiated Agreement/On-Site Rate Per Negotiated Agreement/Off-Site	84.00% _N/A_
Rate per Indirect Cost Proposal/On-Site Rate per Indirect Cost Proposal/Off-Site	N/A
Rate Per Audit/On-Site Rate Per Audit/Off-Site	<u>41.46%</u> <u>N/A</u>

- (A) The award period is March 1, 2000 to February 28, 2002.
- (B) The total direct costs plus the claimed indirect costs total \$17,422 for the period March 1, 2000 to December 31, 2000 agrees with the cumulative net disbursements on the FCTR as of the quarter ended December 31, 2000.
- (C) Indirect costs were based upon the rate specified above as "Rate Billed to NSF."
- (**) Award letter does not have approved rates. Rates per MBG proposed budget.

National Science Foundation Award Number DEB-9981249 Awarded To

MISSOURI BOTANICAL GARDEN

Schedule of Over (Under) Recovered Indirect Costs For the Period June 15, 2000 to December 31, 2000 (A) Interim (Unaudited)

Cost Category	FYE <u>12/31/00</u>
Personnel costs	\$
Equipment Participant support costs	
Subaward costs	
Other direct costs	
Total direct costs	5,327 (B)
Exclusions:	
Equipment	
Participant support	
Subawards > than \$25,000	
Modified total direct cost (MTDC) base	<u>\$ 5,327</u>

Breakdown of MTDC by On-Site and Off-Site/Calculation of Indirect Costs (I/C):

	FYE 12/31/00			
	On-Site	Off-Site (D)	_Total_	
Total MTDC Rate per I/C Audit	\$ 4,927 41.46%	\$ 400 _17.30%	<u>\$ 5,327</u>	
Calculated I/C per audit Claimed indirect (C)	2,043 3,429	69 59	\$ 2,112 3,488	(B)
Over/(Under) recovered I/C	<u>\$ 1,386</u>	<u>\$ (10)</u>	<u>\$ 1,376</u>	

National Science Foundation Award Number DEB-9981249 Awarded To

MISSOURI BOTANICAL GARDEN

Schedule of Over (Under) Recovered Indirect Costs (Cont.)
For the Period June 15, 2000 to December 31, 2000 (A)
Interim
(Unaudited)

Cost Category	FYE 12/31/00
Indirect Cost Rates:	
Rate Per Award/ On-Site (**)	
Rate Per Award/ Off-Site (**)	(D)
Rate Billed to NSF/On-Site	<u>69.60%</u>
Rate Billed to NSF/Off-Site	<u>14.80%</u>
Rate Per Negotiated Agreement/On-Site	<u>84.00%</u>
Rate Per Negotiated Agreement/Off-Site	<u>14.80%</u>
Rate per Indirect Cost Proposal/On-Site	
Rate per Indirect Cost Proposal/Off-Site	
Rate Per Audit/On-Site	<u>41.46%</u>
Rate Per Audit/Off-Site	17.30%

- (A) The award period is June 15, 2000 to May 31, 2002.
- (B) The total direct costs plus the claimed indirect costs total \$8,815 for the period June 15, 2000 to December 31, 2000 agrees with the cumulative net disbursements on the FCTR as of the quarter ended December 31, 2000.
- (C) Indirect costs were based upon the rate specified above as "Rate Billed to NSF."
- (D) The MBG award budget did not list an off-site rate for this award.
- (**) Award letter does not have approved rates. Rates per MBG proposed budget.

National Science Foundation Award Number DEB-0072682 Awarded To

MISSOURI BOTANICAL GARDEN

Schedule of Over (Under) Recovered Indirect Costs For the Period August 15, 2000 to December 31, 2000 (A) Interim (Unaudited)

Cost Category	FYE 12/31/00	
Personnel costs	\$	
Equipment		
Participant support costs		
Subaward costs		
Other direct costs		
Total direct costs	131,443	(B)
Exclusions:		
Equipment		
Participant support		
Subawards > than \$25,000		
Modified total direct cost (MTDC) base	<u>\$ 131,443</u>	

Breakdown of MTDC by On-Site and Off-Site/Calculation of Indirect Costs (I/C):

	FYE 12/31/00		
	On-Site	Off-Site	Total
Total MTDC Rate per I/C Audit	\$ 131,443 41.46%	\$ -0- 17.30%	<u>\$ 131,443</u> —
Calculated I/C per audit Claimed indirect (C)	54,496 91,485	-0- -0-	\$ 54,496 91,485 (B)
Over/(Under) recovered I/C	\$ 36,989	\$ -0-	\$ 36,989

National Science Foundation Award Number DEB-0072682 Awarded To

MISSOURI BOTANICAL GARDEN

Schedule of Over (Under) Recovered Indirect Costs (Cont.)
For the Period August 15, 2000 to December 31, 2000 (A)
Interim
(Unaudited)

Cost Category	FYE 12/31/00
Indirect Cost Rates:	
Rate Per Award/ On-Site (**)	
Rate Per Award/ Off-Site (**)	
Rate Billed to NSF/On-Site	<u>69.60%</u>
Rate Billed to NSF/Off-Site	<u>14.80%</u>
Rate Per Negotiated Agreement/On-Site	<u>84.00%</u>
Rate Per Negotiated Agreement/Off-Site	<u>14.80%</u>
Rate per Indirect Cost Proposal/On-Site	
Rate per Indirect Cost Proposal/Off-Site	
Rate Per Audit/On-Site	41.46%
Rate Per Audit/Off-Site	17.30%

- (A) The award period is August 15, 2000 to July 31, 2001.
- (B) The total direct costs plus the claimed indirect costs total \$222,928 for the period August 15, 2000 to December 31, 2000 agrees with the cumulative net disbursements on the FCTR as of the quarter ended December 31, 2000.
- (C) Indirect costs were based upon the rate specified above as "Rate Billed to NSF."
- (**) Award letter does not have approved rates. Rates per MBG proposed budget.

National Science Foundation Award Number DEB-0072657 Awarded To

MISSOURI BOTANICAL GARDEN

Schedule of Over (Under) Recovered Indirect Costs For the Period June 15, 2000 to December 31, 2000 (A) Interim (Unaudited)

Cost Category	FYE 12/31/00	
Personnel costs	\$	
Equipment		
Participant support costs		
Subaward costs		
Other direct costs		
Total direct costs	6,746	(B)
Exclusions:		` ,
Equipment		
Participant support		
Subawards > than \$25,000		
Modified total direct cost (MTDC) base	<u>\$ 6,746</u>	
Breakdown of MTDC by On-Site and Off-Site/Calculation of Indirect C	costs (I/C):	

	FYE 12/31/00			
	On-Site	Off-Site (D)	<u>Total</u>	
Total MTDC Rate per I/C Audit	\$ 6,044 41.46%	\$ 702 _17.30%	<u>\$ 6,746</u>	
Calculated I/C per audit Claimed indirect (C)	2,506 4,207	121 104	\$ 2,627 4,311	(B)
Over/(Under) recovered I/C	<u>\$ 1,701</u>	<u>\$ (17)</u>	<u>\$ 1,684</u>	

National Science Foundation Award Number DEB-0072657 Awarded To

MISSOURI BOTANICAL GARDEN

Schedule of Over (Under) Recovered Indirect Costs For the Period June 15, 2000 to December 31, 2000 (A) Interim (Unaudited)

Cost Category	FYE 12/31/00
Indirect Cost Rates: Rate Per Award/ On-Site (**) Rate Per Award/ Off-Site (**)	
Rate Billed to NSF/On-Site Rate Billed to NSF/Off-Site	<u>69.60%</u> <u>14.80%</u>
Rate Per Negotiated Agreement/On-Site Rate Per Negotiated Agreement/Off-Site	84.00% 14.80%
Rate per Indirect Cost Proposal/On-Site Rate per Indirect Cost Proposal/Off-Site	
Rate Per Audit/On-Site Rate Per Audit/Off-Site	<u>41.46%</u> 17.30%

- (A) The award period is August 15, 2000 to July 31, 2003.
- (B) The total direct costs plus the claimed indirect costs total \$11,057 for the period August 15, 2000 to December 31, 2000 agrees with the cumulative net disbursements on the FCTR as of the quarter ended December 31, 2000.
- (C) Indirect costs were based upon the rate specified above as "Rate Billed to NSF."
- (**) Award letter does not have approved rates. Rates per MBG proposed budget.

National Science Foundation Award Number DEB-0072433 Awarded To

MISSOURI BOTANICAL GARDEN

Schedule of Over (Under) Recovered Indirect Costs
For the Period September 15, 2000 to December 31, 2000 (A)
Interim
(Unaudited)

Cost Category	FYE <u>12/31/00</u>
Personnel costs	\$
Equipment	
Participant support costs	
Subaward costs	
Other direct costs	
Total direct costs	6,637 (B)
Exclusions:	
Equipment	(1,683)
Participant support	,
Subawards > than \$25,000	
Modified total direct cost (MTDC) base	\$ 4,954

Breakdown of MTDC by On-Site and Off-Site/Calculation of Indirect Costs (I/C):

	FYE 12/31/00			
	On-Site	Off-Site	<u>Total</u>	
Total MTDC Rate per I/C Audit	\$ 4,954 41.46%	\$ -0- 17.30%	<u>\$ 4,954</u>	
Calculated I/C per audit Claimed indirect (C)	2,054 3,447	-0- <u>-0</u> -	\$ 2,054 3,447	(B)
Over/(Under) recovered I/C	<u>\$ 1,393</u>	<u>\$ -0</u> -	<u>\$ 1,393</u>	

National Science Foundation Award Number DEB-0072433 Awarded To

MISSOURI BOTANICAL GARDEN

Schedule of Over (Under) Recovered Indirect Costs
For the Period September 15, 2000 to December 31, 2000 (A)
Interim
(Unaudited)

Cost Category	FYE 12/31/00
Indirect Cost Rates:	
Rate Per Award/ On-Site (**)	
Rate Per Award/ Off-Site (**)	
Rate Billed to NSF/On-Site	<u>69.60%</u>
Rate Billed to NSF/Off-Site	<u>14.80%</u>
Rate Per Negotiated Agreement/On-Site	<u>84.00%</u>
Rate Per Negotiated Agreement/Off-Site	14.80%
Rate per Indirect Cost Proposal/On-Site	
Rate per Indirect Cost Proposal/Off-Site	
Rate Per Audit/On-Site	41.46%
Rate Per Audit/Off-Site	<u>17.30%</u>

- (A) The award period is September 15, 2000 to August 31, 2003.
- (B) The total direct costs plus the claimed indirect costs total \$10,084 for the period September 15, 2000 to December 31, 2000 agrees with the cumulative net disbursements on the FCTR as of the quarter ended December 31, 2000.
- (C) Indirect costs were based upon the rate specified above as "Rate Billed to NSF."
- (**) Award letter does not have approved rates. Rates per MBG proposed budget.

Listing of NSF Awards Active During Audit Period Not Affected by Indirect Cost Audit For the years ended December 31, 1999 and 2000 (Unaudited)

There were three NSF awards that were active during the years ended December 31, 1999 and 2000, that did not include:

- Indirect costs incurred or billed to NSF on an FCTR; or,
- Indirect costs based upon the application of a rate.

The listing below presents those awards along with an explanation for their exclusion from this audit.

NSF Award Number	Award Period	Explanation
		_
DBI-9723478	08/15/97-07/31/99	(A)
DEB-9815857	03/15/99-02/29/00	(B)
SES-0080295	09/01/00-08/31/00	(C)

- (A) There were indirect costs claimed for 1999, however, the amount's claimed to NSF were based upon an adjustment for underclaim's to NSF for previous years award activities.
- (B) No indirect costs budgeted/approved or claimed under this award.
- (C) A flat amount of indirect costs in lieu of an amount based upon a rate.

SECTION V

AWARDEE'S RESPONSE

Missouri Botanical Garden Memorandum

To:

From:

Date: September 5, 2003

Subject: Missouri Botanical Garden's responses to NSF audit findings

Material weakness items:

Point 1- Regarding general ledger segregation of direct and indirect costs.

The Garden accepts the general nature of the recommendation, but the recommended modification of the general ledger system at this time is impractical. As an alternative, but equally effective method of determining and accounting for direct and indirect costs, the Garden will use an excel spreadsheet to compile the data. As discussed in Point 3 below regarding payroll and attendance records, the Garden now has an extemporaneous system to capture actual time worked for direct and indirect costs, and will base its excel spreadsheet calculations on real data, rather than modify the general ledger system.

In July, 2004, the Garden will move to a new accounting system that will enable it to charge direct and indirect costs directly to the general ledger.

Point 2 - Regarding procedures detailing the preparation process of the indirect cost rate proposal, and the adjustment of the Garden's indirect. cost pool.

The Garden accepts the portion of the recommendation that written policies and procedures detailing processes for the preparation of indirect cost rate proposal should be developed in a formal manner. Garden staff has begun the process of formalizing narratives, preparing sample schedules and flow charts to document the process, expanding on the present procedure that relies on a series of footnote explanations accompanying the spreadsheets. These written procedures may be further modified as a result of resolution of these audit findings.

The Garden believes its position is correct to include \$4,059,102 of curatorial costs in the indirect cost pool, and these costs were not erroneously included. Curatorial costs include salaries, fringe benefits, supplies, shipping, etc. incurred to collect and maintain natural history specimens in the Garden's herbarium, made available to all researchers, and are not project-specific. The herbarium collection is much like the Garden's library, in that it is a collection of reference material maintained to be accessed by researchers to facilitate their scientific endeavors. These collections represent a historical repository of scientific

data that is critical to the successful completion of all NSF projects conducted by the Garden. They are neither specific to an individual project nor maintained by project personnel, but serve as an open reference collection for research at the Garden as well as throughout the scientific community, and thus, is part of our indirect cost pool.

The Garden requests that the proposed adjustment to exclude curatorial costs be reversed and the rate restored to reflect that change.

Point 3 - Regarding time and attendance records

The Garden accepts this finding. The Garden has now implemented a time-keeping system to document the actual time worked on each project/award as well as time spent on direct and indirect cost activities. These hours are recorded on individual time sheets (see examples from two employees attached), and subsequently summarized on a spreadsheet to create the necessary direct/indirect allocation.

Material deficiency item:

Point 1 - Regarding annual submissions.

The Garden is prepared to submit indirect cost rate proposals to the NSF on an annual basis or on any schedule deemed appropriate by the NSF. Since 1971, the Garden has submitted biannual submissions, and the NSF has approved rates for two years. Attached are representative letters from the NSF approving multi-year rates, thus leaving the reader to conclude such multi-year submissions were acceptable. Because the Garden's research expenditure level does not experience a substantial change from year to year, it appears that continuing a two-year rate submission is reasonable.

Regarding Schedule C, schedule of auditor's adjustments and eliminations (page 38):

To eliminate curatorial costs:

The Garden believes these costs should be restored. Please see the Garden's response and rationale to Material Weakness Point 2 above.

Adjust costs to agree with general ledger:

Attributed to clerical errors made during the rate data compilation process.

Fixed assets included in direct and indirect cost pools:

For financial reporting purposes, the Garden's records as fixed assets, those items in excess of \$15,000. Due to an oversight, items between \$5,000 and \$15,000 were not reclassified out of the cost pools when the rate was calculated. Future rate calculations will include the necessary adjustments to exclude these items.

Missing vendor invoices:

During the audit process, the staff were unable to find several misfiled documents. A subsequent search did locate a number of the misfiled documents, and copies are attached for audit purposes.

The cost of alcoholic beverages were included in the cost pool: Due to a clerical oversight, certain out-of-town meal costs including alcohol were

misclassified as travel. Procedures now include a step to review such costs to ensure alcohol is not included the rate calculation.

alconol is not included the rate calculation.

The cost of business class airfares were included in the coast pool:

The Garden's employee handbook directs that economy fares be used. However, in rare cases, business .class is used to accommodate schedule and destination requirements. It is the intention of the Garden to remove these types of costs from the calculation, but, due to an oversight, the identified business class fares were not eliminated from the calculation.

DETAILED (PERSONAL IDENTIFYING INFORMATION) ON SCHEDULES C-1 AND C-2

Details of Adjustments to Indirect Costs - Lack of Adequate Documentation For the Year Ended December 31, 1999

Vendor/Payee	Check <u>Date</u>	Check <u>Number</u>	G/L Account Number	Account Description	Transaction Description	Adjustment <u>Amount</u>	Ref
						\$	(C)
						<u>\$</u>	(A)
							(B), (C)
			Total lack o	f adequate documentation	n	<u>\$ 25,050</u>	

Delineation of Adjustments by MBG Indirect Cost Proposal Line Item:

- (A) Maintenance, Security, Utilities and Other Related Expenses: Maintenance Expenses Other Expenses
- (B) Administrative Expenses: Other Expenses
- (C) Documentation provided by MBG with their response to the draft report.

Details of Adjustments to Indirect Costs - Fixed Assets in Unrestricted Expenses For the Year Ended December 31, 1999'

Vendor/Payee	Check <u>Date</u>	Check Number	G/L Account <u>Number</u>	Account Description	Transaction Description	Adjustment Amount	Ref
						\$ 1,464	(A)

<u>Delineation of Adjustments by MBG Indirect Cost Proposal Line Item:</u>

(A) Maintenance, Security, Utilities and Other Related Expenses: Maintenance Expenses - Other Expenses

Details of Adjustments to Indirect Costs - Unallowable Expenses (Alcoholic Beverages)
For the Years Ended December 31, 1999

Vendor/Payee	Check <u>Date</u>	Check Number	G/L Account Number	Account Description	<u>Transaction Description</u>	Adjustment <u>Amount</u> Ref
						\$ 138 (A)

<u>Delineation of Adjustments by MBG Indirect Cost Proposal Line Item:</u>

(A) Administrative Expenses: Other Expenses

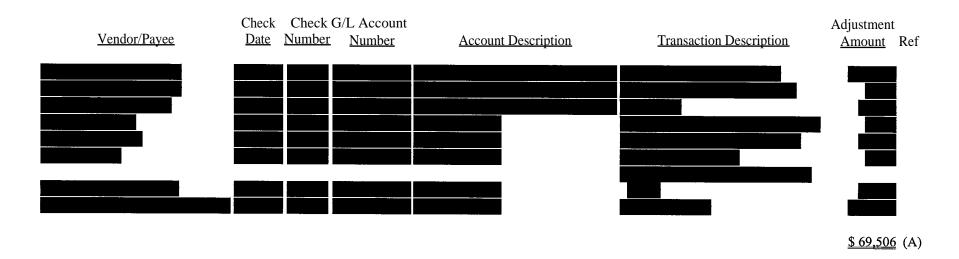
Details of Adjustments to Indirect Costs - Lack of Adequate Documentation For the Years Ended December 31, 2000

Vendor/Payee	Check <u>Date</u>	Check <u>Number</u>	G/L Account Number	Account Description	Transaction Description	Adjustment <u>Amount</u>	
							(A)
							(B)
							(C)
						<u>\$6,903</u>	

<u>Delineation of Adjustments by MBG Indirect Cost Proposal Line Item:</u>

- (A) Maintenance, Security, Utilities and Other Related Expenses: Maintenance Expenses Other Expenses
- (B) Library Expenses: Other Expenses
- (C) Administrative Expenses: Other Expenses

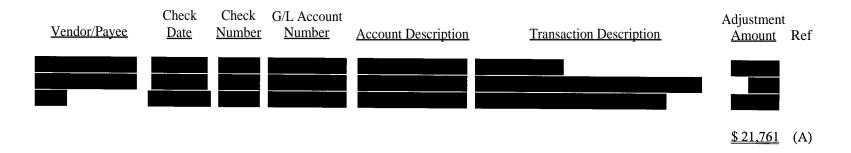
Details of Adjustments to Indirect Costs - Fixed Assets in Unrestricted Expenses For the Years Ended December 31, 2000



<u>Delineation of Adjustments by MBG Indirect Cost Proposal Line Item:</u>

(A) Maintenance, Security, Utilities and Other Related Expenses: Maintenance Expenses - Other Expenses

Details of Adjustments to Indirect Costs - Unallowable Costs (Business Class Airfares)
For the Years Ended December 31, 2000



<u>Delineation of Adjustments by MBG Indirect Cost Proposal Line Item:</u>

(A) Administrative Expenses: Other Expenses