

KRA 2: RESEARCH

Establish SDNHM as a leading research institution and forum for scientific discussion and cooperation in and about our region.

Rationale:

By documenting and interpreting the biological and geological uniqueness of our binational region, we have the opportunity to help citizens develop informed opinions about environmental issues. The basis for that awareness and informed decision-making is the scientific, collections-based research that forms the core of the Biodiversity Research Center of the Californias (BRCC).

Through collaboration with other researchers who focus on the biodiversity and biogeography of southern California and the peninsula of Baja California, we also have the opportunity to develop new strategic research programs. These will ultimately synthesize the many individual efforts into a broader view of the biological and geological evolution of our region. Researchers who focus on specific questions benefit from the collaboration and discussion of colleagues addressing complementary questions. The museum will facilitate this synergy and become a leading research institution by providing resources and opportunities for binational collaboration, publications, and symposia.

Design and implementation of an effective bioinformatics system will support the research programs by providing easy access to the extensive store of data represented by the 7.5 million specimens in the museum's growing collections. It will also serve to improve the quality of our efforts to manage and care for the specimens.

To establish the museum as a leading research institution, there are significant personnel requirements that must be achieved. Without additional key positions, the threshold for a viable, strong research culture will not be achieved.

OBJECTIVE 2.1 (Research priority)

Develop and implement a collaborative, peninsular biogeography research program with international participation by 2012.

STRATEGIES

- 2.1.1 Determine research priorities and key partnerships, collaborators and alliances
- 2.1.2 Complete at least two regional field expeditions with international collaboration
- 2.1.3 Publish technical literature in peer-reviewed journals
- 2.1.4 Publish a major synthesis of research
- 2.1.5 Identify topics with popular appeal and develop relevant products (e.g., programs, web pages, field guides)

OBJECTIVE 2.2 (Research priority)

Develop and implement a collaborative research program for the geological and paleontological history of Peninsular California with international participation by 2012.

STRATEGIES

- 2.2.1 Determine research priorities and key partnerships, collaborators and alliances
- 2.2.2 Complete at least two regional field expeditions with international collaboration
- 2.2.3 Publish technical literature in peer-reviewed journals
- 2.2.4 Publish a major synthesis of research
- 2.2.5 Identify topics with popular appeal and develop relevant products (e.g., programs, web pages, field guides)

OBJECTIVE 2.3 (Bioinformatics system)

Create an information system to support stewardship of collections and research priorities.

STRATEGIES

- 2.3.1 Implement an upgraded system for internal management of all collection data with a phased implementation schedule
- 2.3.2 Achieve 85% completion of data capture for existing paleontology, botany and marine invertebrates collections and at least 95% data capture for library collections.
- 2.3.3 Implement web-based data capture systems to facilitate field operations

- 2.3.4 Implement web-based accessibility of specimen data
- 2.3.5 Implement an integrated network of databases with key partners and affiliates

OBJECTIVE 2.4 (Infrastructure of BRCC)

Develop the infrastructure to strengthen research culture of museum

STRATEGIES

- 2.4.1 Determine and implement an effective organizational structure to support research priorities and stewardship of collections
- 2.4.2 Improve visibility of BRCC
- 2.4.3 Develop training and educational opportunities
- 2.4.4 Improve quality of collection care and management
- 2.4.5 Establish scientific graphics and publications unit
- 2.4.6 Obtain and expand research facilities and equipment
- 2.4.7 Secure endowment and other funds to support infrastructure

San Diego Natural History Museum

ACTION PLAN

Key Result Area 2: Establish SDNHM as a leading research institution and forum for scientific discussion and cooperation in and about our region.

Planning Leaders: Cato, Rebman, Hollingsworth, Unitt, Beller

Objective 2.1: Develop a collaborative, binational peninsular biogeography research program.

Dates of Action Plan: June 5, 2002

Strategy 2.1.1: Determine research priorities and key partnerships, collaborators, and alliances.

Presented:

Approved:

Action Steps	Responsible Person*	Starting Date	Scheduled Completion Date	Actual Completion Date	REMARKS
2.1.1.1 – Develop a written rationale statement for research program, delineating major areas of research and their relationship to program	Dep. Dir.				*Positions listed in bold face are currently empty.
2.1.1.2 – Prioritize botanical research projects and identify key individuals and organizations for alliances.	Cur. Bot	July 2002	Within 6 mo of hiring Dep.Dir.		Curator of Botany has a synopsis of current research projects with notes re: collaborators and needed funding for assistants, publications, equipment, etc.
2.1.1.3 -- Prioritize vertebrate research priorities and identify key individuals and organizations for alliances.	Cur. Herp, Coll.Mgr.Bird	July 2002	Within 6 mo of hiring Dep.Dir		Review current list of institutional collaborators (CICESE, CIBNOR, UABCS, UABC, SDSU, UCSD, USD)
2.1.1.4 -- Specify invertebrate research priorities and identify key individuals and organizations for alliances	Cur. Ento., Coll. Mgr MI	July 2002	Within 6 mo of hiring Cur.Ento, Dep.Dir.		Can not proceed without hiring Curator of Entomology

2.1.1.5 -- Specify research priorities for ecology & conservation, and identify key individuals and organizations.	Dep. Dir.		Within 6 mo of hiring Dep.Dir		Assumes that Deputy Director will have expertise in ecology & conservation
2.1.1.6 – Implement regular communication with collaborators, and formal agreements with affiliates	Dep. Dir., BRCC Sci. Liaison	July 2002	Annual review		Ongoing process; will be strengthened with hire of Deputy Director

San Diego Natural History Museum

ACTION PLAN

Key Result Area 2: Establish SDNHM as a leading research institution and forum for scientific discussion and cooperation in and about our region.

Planning Leaders: Cato, Rebman, Hollingsworth, Unitt, Beller

Objective 2.1: Develop a collaborative, binational peninsular biogeography research program.

Dates of Action Plan: June 5, 2002

Strategy 2.1.2: Complete at least two regional field expeditions with international collaboration.

Presented:

Approved:

Action Steps	Responsible Person	Starting Date	Scheduled Completion Date	Actual Completion Date	REMARKS
2.1.2.1 – Identify two regions for which exploration is essential to the program and develop a research team.	Dep.Dir.		Within 6 mo of hire		Input by BRCC Sci. Liaison, BRCC staff, collaborators.
2.1.2.2 – Develop schedule, list of expected products (publications, web pages, etc.), and funding plan for trip #1	Dep. Dir., BRCC Sci. Liaison, Cur. Bot.	In progress for trip #1	October 2002		Input by research team, administration, website manager, development; trip #1 scheduled for Oct 2002, led by Cur.Bot.
2.1.2.3 – Obtain permits – trip #1	BRCC Sci. Liaison	In progress for trip #1	October 2002		Requires new permits for each trip; requires input by research team for specific trip
2.1.2.4 – Implement expedition #1	Dep. Dir., Cur. Bot.	In progress for trip #1	November 2002		+ research team
2.1.2.5 – Facilitate reporting of expedition in variety of formats (technical, popular) – trip #1	Dep. Dir., BRCC Sci. Liaison,	Jul 2002	Spring 2004		+ research team, marketing, public programs

	Cur. Bot.				
2.1.2.6 – Develop schedule, list of expected products (publications, web pages, etc.), funding plan for trip #2	Dep. Dir. , BRCC Sci. Liaison	Fall 2004	Spring 2005		Input by research team, administration, website manager, development;
2.1.2.7 – Obtain permits – trip #2	BRCC Sci. Liaison	1 year before start of trip	At start of trip		Requires new permits for each trip; requires input by research team for specific trip
2.1.2.8– Implement expedition #2	Dep. Dir. ,	2005	2005		+ research team
2.1.2.9– Facilitate reporting of expedition in variety of formats (technical, popular) – trip #2	Dep. Dir. , BRCC Sci. Liaison	2006	2008		+ research team, marketing, public programs

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Planning Leaders: Cato, Rebman, Hollingsworth, Unitt, Beller

Objective 2.1: Develop a collaborative, binational peninsular biogeography research program.

Dates of Action Plan: June 5, 2002

Strategy 2.1.3: Publish technical literature in peer-reviewed journals.

Presented:

Approved:

Action Steps	Responsible Person	Starting Date	Scheduled Completion Date	Actual Completion Date	REMARKS
2.1.3.1 – Complete and facilitate botanical research publications	Cur. Bot	In progress	Review annually		Reviewed at annual evaluation
2.1.3.2 – Complete and facilitate herpetological research publications	Cur. Herp	In progress	Review annually		Reviewed at annual evaluation
2.1.3.3 – Complete and facilitate ornithology research publications	Coll.Mgr. Bird	In progress	Review annually		Reviewed at annual evaluation
2.1.3.4 – Complete and facilitate invertebrate research publications	Cur. Ento		Review annually		Dependent on filling position
2.1.3.5 – Complete and facilitate ecological research publications	Dep. Dir.		Review annually		Dependent on filling position

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ACTION PLAN

Key Result Area 2: Establish SDNHM as a leading research institution and forum for scientific discussion and cooperation in and about our region.

Planning Leaders: Cato, Rebman, Hollingsworth, Unitt, Beller

Objective 2.1: Develop a collaborative, binational peninsular biogeography research program.

Dates of Action Plan: June 5, 2002

Strategy 2.1.4: Publish a major synthesis of research

Presented:

Approved:

Action Steps	Responsible Person	Starting Date	Scheduled Completion Date	Actual Completion Date	REMARKS
2.1.4.1 – Develop outline for major publication based on rationale statement, research priorities, and alliances	Dep. Dir.		Within 6 months of hire		Input by BRCC staff, research team
2.1.4.2 – Develop schedule and funding plan	Dep. Dir		Within 1 year of hire		Input by research team, administration, development
2.1.4.3 – Implement regular communication among research team to track progress	Dep. Dir, BRCC Sci. Liaison		Within 1 year of hire		
2.1.4.4 – Complete draft of chapters	Dep. Dir., Mus. Editor		2011		
2.1.4.5 – Complete publication	Dep. Dir., Mus. Editor		2012		

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ACTION PLAN

Key Result Area 2: Establish SDNHM as a leading research institution and forum for scientific discussion and cooperation in and about our region.

Planning Leaders: Cato, Rebman, Hollingsworth, Unitt, Beller

Objective 2.1: Develop a collaborative, binational peninsular biogeography research program.

Dates of Action Plan: June 5, 2002

Strategy 2.1.5: Identify topics with popular appeal and develop relevant products (e.g., programs, web pages, field guides).

Presented:

Approved:

Action Steps	Responsible Person	Starting Date	Scheduled Completion Date	Actual Completion Date	REMARKS
2.1.5.1 – Identify key topics for development of products	Dep.Dir	Within 6 mo of hire	Review annually		Input by BRCC staff, research team, marketing, public programs staff; directly tied to research priorities of 2.1.1
2.1.5.2 – Develop annual goals and implement relevant products	Dep. Dir., Cur. Bot., Cur. Herp., Coll.Mgr.Bird, Coll.Mgr.MI, Cur Ento, Dir.Library	July 2002	Review annually		Work directly with appropriate public programs staff, marketing

San Diego Natural History Museum

ACTION PLAN

Key Result Area 2: Establish SDNHM as a leading research institution and forum for scientific discussion and cooperation in and about our region.

Planning Leader: Deméré

Objective 2.2: Develop a collaborative, binational research program for the geological and paleontological history of peninsular California.

Dates of Action Plan: June 10, 2002

Strategy 2.2.1: Determine research priorities and key partnerships, collaborators, and alliances.

Presented:

Approved:

Action Steps	Responsible Person	Starting Date	Scheduled Completion Date	Actual Completion Date	REMARKS
2.2.1.1 -- Develop a written rationale statement for research program, delineating major areas of research and their relationship to program	Cur. Pal	June 2003	October 2003		Input by BRCC staff
2.2.1.2 -- Clarify paleontological research priorities and identify key individuals and organizations for alliances.	Cur. Pal.	July 2003	October 2003		Input by BRCC Sci. Liaison, BRCC staff
2.2.1.3 - Clarify geological research priorities and identify key individuals and organizations for alliances.	Cur. Pal.	July 2003	October 2003		Input by BRCC Sci. Liaison, BRCC staff
2.2.1.4 – Implement regular communication with collaborators, and formal agreements with affiliates when appropriate	Cur. Pal., Dep. Dir. , BRCC Sci. Liaison	August 2003	Ongoing		Ongoing process over life of the project

San Diego Natural History Museum

ACTION PLAN

Key Result Area 2: Establish SDNHM as a leading research institution and forum for scientific discussion and cooperation in and about our region.

Planning Leader: Deméré

Objective 2.2: Develop a collaborative, binational research program for the geological and paleontological history of peninsular California.

Dates of Action Plan: June 10, 2002

Strategy 2.2.2: Complete at least two regional field expeditions with international collaboration.

Presented:

Approved:

Action Steps	Responsible Person	Starting Date	Scheduled Completion Date	Actual Completion Date	REMARKS
2.2.2.1 – Identify two regions for which exploration is essential to the program and develop research team	Cur. Pal.	September 2003	December 2003		Input by BRCC Sci. Liaison, BRCC staff, Board Research Committee
2.2.2.2 – Develop schedule, list of expected products (publications, web pages, etc.), and funding plan	Cur. Pal., BRCC Sci. Liaison	November 2003	February 2003		Input and assistance from research team, administration staff, website manager, and development staff
2.2.2.3 – Obtain permits	BRCC Sci. Liaison	November 2003	May 2004		Work with BRCC Sci. Liaison and Mexican collaborators
2.2.2.4 – Implement first expedition	Cur. Pal.	October 2004	December 2004		Cooperation of research team
2.2.2.5 – Facilitate reporting of first expedition in variety of formats (technical, popular, media)	Cur. Pal., BRCC Sci. Liaison	January 2005	1 year after completion of expedition		Input from research team, marketing, public programs, and webteam
2.2.2.6 – Implement second expedition	Cur. Pal.	October 2005	December 2006		Cooperation of research team

2.2.2.7 – Facilitate reporting of second expedition in variety of formats (technical, popular, media)	Cur. Pal.	January 2006	1 year after completion of expedition		Input from research team, marketing, public programs, and webteam
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ACTION PLAN

Key Result Area 2: Establish SDNHM as a leading research institution and forum for scientific discussion and cooperation in and about our region.

Planning Leader: Deméré

Objective 2.2: Develop a collaborative, binational research program for the geological and paleontological history of peninsular California.

Dates of Action Plan: June 10, 2002

Strategy 2.2.3: Publish technical literature in peer-reviewed journals

Presented:

Approved:

Action Steps	Responsible Person	Starting Date	Scheduled Completion Date	Actual Completion Date	REMARKS
2.2.3.1 – Complete and facilitate paleontological research publications	Cur. Pal.	Ongoing	Review annually		Coordinate with scientific collaborators. Requires Scientific Publications Editor.
2.2.3.2 -- Complete and facilitate geological research publications	Cur. Pal.	Ongoing	Review annually		Coordinate with scientific collaborators. Requires Scientific Publications Editor.

San Diego Natural History Museum

ACTION PLAN

Key Result Area 2: Establish SDNHM as a leading research institution and forum for scientific discussion and cooperation in and about our region.

Planning Leader: Deméré

Objective 2.2: Develop a collaborative, binational research program for the geological and paleontological history of peninsular California.

Dates of Action Plan: June 10, 2002

Strategy 2.2.4: Publish a major synthesis of research

Presented:

Approved:

Action Steps	Responsible Person	Starting Date	Scheduled Completion Date	Actual Completion Date	REMARKS
2.2.4.1 – Develop outline for major publication based on rationale statement, research priorities, and alliances	Cur. Pal.	June 2006	December 2006		Input by research team
2.2.4.2 – Develop schedule and funding plan	Cur. Pal.	August 2006	February 2007		Input by research team, administration, development
2.2.4.3 – Implement regular communication among research team to track progress	Cur. Pal., BRCC Sci. Liaison	August 2006	Ongoing		Input from collaborators and Scientific Publications Editor
2.2.4.4 – Complete draft of chapters	Cur. Pal., Mus. Editor	May 2007	May 2007		Input from Scientific Publications Editor and publisher
2.2.4.5 – Complete publication	Cur. Pal., Mus. Editor	May 2008	May 2008		Input from Scientific Publications Editor and publisher

San Diego Natural History Museum

ACTION PLAN

Key Result Area 2: Establish SDNHM as a leading research institution and forum for scientific discussion and cooperation in and about our region.

Planning Leader: Deméré

Objective 2.2: Develop a collaborative, binational research program for the geological and paleontological history of peninsular California.

Dates of Action Plan: June 7, 2002

Strategy 2.2.5: Identify topics with popular appeal and develop relevant products (e.g., programs, web pages, field guides)

Presented:

Approved:

Action Steps	Responsible Person	Starting Date	Scheduled Completion Date	Actual Completion Date	REMARKS
2.2.5.1 – Identify key topics for development of products	Cur. Pal.	June 2003	Review annually		Input by BRCC staff, research team, marketing, public programs staff
2.2.5.2 – Develop schedule and implement relevant products	Cur. Pal., research team members	September 2003	Review annually		Work directly with appropriate Museum staff public programs, marketing, website, gift store.

San Diego Natural History Museum

ACTION PLAN

Key Result Area 2: Establish SDNHM as a leading research institution and forum for scientific discussion and cooperation in and about our region.

Planning Leaders: Cato

Objective 2.3: Create information system to support stewardship of collections and research priorities.

Dates of Action Plan: June 5, 2002

Strategy 2.3.1: Implement an upgraded system for internal management of all collection data with a phased implementation schedule.

Presented:

Approved:

Action Steps	Responsible Person	Starting Date	Scheduled Completion Date	Actual Completion Date	REMARKS
2.3.1.1 – Recommend an information system with phased implementation schedule and funding requirements	Cur.Coll.	In progress	July 2002		Input & analysis by BRCC depts., information tech staff and consultants
2.3.1.2 – Develop funding plan with museum administration and development	Cur.Coll.	July 2002	September 2002		Requires involvement of BRCC staff (grants, dept. budgets) as well as additional funding
2.3.1.3 – Implement testing of recommended system and refine process for incorporating other collections	Cur.Coll., Cur. Herp., Coll.Mgr.MI	September 2002	August 2003		Use acquisitions database, marine invertebrates collection & herpetology collection database for testing system; will be facilitated if HerpNet NSF grant is awarded
2.3.1.4 – Hire database programmer to implement and maintain system	Cur.Coll.	ASAP			Requires additional funding; failure to hire position impedes efficient implementation of project
2.3.1.5 – Implement system for botany	Cur. Botany, DB Prog.	July 2003	June 2004		Schedule is dependent on hiring of Database Programmer

2.3.1.6 – Implement system for ornithology	Cur. Coll., Coll.Mgr.Bird, DB Prog	July 2003	June 2004		Schedule is dependent on hiring of Database Programmer
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San Diego Natural History Museum

ACTION PLAN

Key Result Area 2: Establish SDNHM as a leading research institution and forum for scientific discussion and cooperation in and about our region.

Planning Leaders: Cato

Objective 2.3: Create information system to support stewardship of collections and research priorities.

Dates of Action Plan: June 5, 2002

Strategy 2.3.2: Achieve 85% completion of data capture for active collections, including paleontology, botany, marine invertebrates and library collections.

Presented:

Approved:

Action Steps	Responsible Person	Starting Date	Scheduled Completion Date	Actual Completion Date	REMARKS
					Mammalogy, Ornithology, and Herpetology already at 100%
2.3.2.1 – Hire and train data entry staff for paleo	Cur. Pal.	Spring 2003	June 2003		Requires additional funding
2.3.2.2 – Capture and edit data for 85% of existing paleo collection	Cur. Pal., data entry staff	June 2003	July 2006		Failure to add staff prevents attaining goal; volunteer assistance inadequate to obtain 85% capture level
2.3.2.3 – Hire and train data entry staff for botany	Cur. Botany	Spring 2003	June 2003		Requires additional funding
2.3.2.4 – Capture and edit data for 85% of existing botany collection	Cur. Botany, data entry staff	June 2003	July 2006		Failure to add staff prevents attaining goal; volunteer assistance inadequate to obtain 85% capture level
2.3.2.5 – Hire and train data entry staff for marine invertebrates	Cur. Coll., Coll.Mgr MI	Spring 2004	June 2004		Requires additional funding
2.3.2.6 – Capture and edit data for 85% of existing marine invertebrate collection	Cur. Coll., Coll.Mgr MI., data entry staff	June 2004	June 2008		Failure to add staff prevents attaining goal; volunteer assistance inadequate to obtain 85% capture level

2.3.2.5 – Hire and train data entry staff for library	Dir. Lib.	September 2002	December 2002		
2.3.2.6 – Capture and edit data for at least 95% of library collection	Dir. Lib., data entry staff	Dec 2002	Annual review		Document progress annually; Failure to add staff prevents attaining goal; volunteer assistance inadequate to obtain 95% capture level

San Diego Natural History Museum

ACTION PLAN

Key Result Area 2: Establish SDNHM as a leading research institution and forum for scientific discussion and cooperation in and about our region.

Planning Leaders: Cato

Objective 2.3: Create information system to support stewardship of collections and research priorities.

Dates of Action Plan: June 5, 2002

Strategy 2.3.3: Implement web-based data capture systems to facilitate field operations and internal data management

Presented:

Approved:

Action Steps	Responsible Person	Starting Date	Scheduled Completion Date	Actual Completion Date	REMARKS
2.3.3.1 – Develop parameters for web-based data capture system	Cur. Coll., DB Prog.	Within 1 year of hire of DB Prog.	6 mo after start		Input by BRCC depts., info tech staff, website manager
2.3.3.2 – Develop and test interface	DB Prog.		Review annually		Amount of development time depends in part on information system selected; works directly with Website Manager
2.3.3.3 – Develop written protocols to document standards for use	Cur. Coll., DB Prog.	As interface is developed	Review annually		
2.3.3.4 – Evaluate effectiveness and recommend refinements/revisions	Cur. Coll., DB Prog.	1 year after pilot developed	3 months later		Solicit input from BRCC staff, museum Info Tech staff, Website Manager

San Diego Natural History Museum

ACTION PLAN

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Planning Leaders: Cato

Objective 2.3: Create information system to support stewardship of collections and research priorities.

Dates of Action Plan: June 5, 2002

Strategy 2.3.4: Implement web-based accessibility of specimen data.

Presented:

Approved:

Action Steps	Responsible Person	Starting Date	Scheduled Completion Date	Actual Completion Date	REMARKS
2.3.4.1 – Develop parameters for web-based accessibility of system	Cur. Coll., DB Prog.	Within 2 years of hire of DB Prog.	6 months after start		Input by BRCC depts., info tech staff, website director
2.3.4.2 – Develop and test interface	DB Prog.		Review annually		Amount of development time depends in extent of information system selected; works directly with Website Manager
2.3.4.3 – Develop written protocols to document standards for use	Cur. Coll., DB Prog.	As interface is developed	Review annually		
2.3.4.4 – Evaluate effectiveness and recommend refinements/revisions		1 year after pilot developed	Review annually		Solicit input from BRCC staff, museum Info Tech staff, Website Manager

San Diego Natural History Museum

ACTION PLAN

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Planning Leaders: Cato

Objective 2.3: Create information system to support stewardship of collections and research priorities.

Dates of Action Plan: June 5, 2002

Strategy 2.3.5: Implement an integrated network of databases with key partners and affiliates.

Presented:

Approved:

Action Steps	Responsible Person	Starting Date	Scheduled Completion Date	Actual Completion Date	REMARKS
2.3.5.1 – Identify key partners and affiliates for a pilot project	Cur. Coll.	July 2004	January 2005		Input by BRCC staff
2.3.5.2 – Develop objectives and resource requirements for a network	Cur. Coll., BRCC Sci Liaison, DB Prog.	January 2005	June 2006		Direct involvement by BRCC staff of relevant dept., key partners & affiliates, information tech staff, website manager
2.3.5.3 – Develop written agreement clarifying responsibilities of museum & affiliates	Dep. Dir. , Cur. Coll., BRCC Sci Liaison	June 2005	January 2006		Input by appropriate BRCC staff, administration
2.3.5.4 – Seek funding to support pilot network	Dep. Dir. , Cur. Coll., Inst.Dev.staff	July 2005	June 2006		
2.3.5.5 – Implement project	Cur. Coll., DB Prog	July 2006	June 2009		Direct involvement by BRCC staff of relevant dept
2.3.5.6 – Evaluate success of project and propose revisions/refinements	Dep. Dir. , Cur. Coll.,	July 2008	June 2010		Solicit evaluations from BRCC staff, info tech staff, website manager, external

	BRCC Sci Liaison, DB Prog.				researchers, museum affiliates in project
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San Diego Natural History Museum

ACTION PLAN

Key Result Area 2: Establish SDNHM as a leading research institution and forum for scientific discussion and cooperation in and about our region.

Planning Leaders: Cato, Deméré

Objective 2.4: Develop the infrastructure to strengthen the research culture of the museum.

Dates of Action Plan: June 10, 2002

Strategy 2.4.1: Determine and implement an effective organizational structure to support research priorities and stewardship of collections.

Presented:

Approved:

Action Steps	Responsible Person	Starting Date	Scheduled Completion Date	Actual Completion Date	REMARKS
2.4.1.1 – Hire a Deputy Director	Exec. Dir. Cur. Pal.	June 2002	January 2003		Input/coordination from BRCC staff and Board Research Committee
2.4.1.2 -- Develop effective organizational structure with prioritized list of research position and support position needs	Dep.Dir.	January 2003	June 2003		Input by BRCC staff, administration
2.4.1.3 – Develop funding strategy for new positions	Dep. Dir, Exec. Dir.	May 2003	September 2003		Input by development
2.4.1.4 – Fill 2 curatorial research positions within 3 years of hire of Dep.Dir.	Dep. Dir, Exec. Dir	July 2003	January 2005		Fundraising assistance essential from development department staff
2.4.1.5 – Fill critical support positions to implement strategies for information systems and research objectives	Dep. Dir.	Sept 2002	Ongoing		Fundraising assistance essential Library support staff position is essential for operation of new Public Reading Room

San Diego Natural History Museum

ACTION PLAN

Key Result Area 2: Establish SDNHM as a leading research institution and forum for scientific discussion and cooperation in and about our region.

Planning Leaders: Cato, Deméré

Objective 2.4: Develop the infrastructure to strengthen the research culture of the museum.

Dates of Action Plan: June 10, 2002

Strategy 2.4.2: Improve visibility of BRCC.

Presented:

Approved:

Action Steps	Responsible Person	Starting Date	Scheduled Completion Date	Actual Completion Date	REMARKS
2.4.2.1 – Create a brochure describing BRCC research and scientific collections priorities	Dep. Dir.	January 2004	July 2004		Work with marketing, scientific publications editor, scientific illustrator, and BRCC staff
2.4.2.2 – Develop website to serve as clearinghouse for “natural history” research in the Peninsular California region. This website would allow any researcher to post ongoing and completed research results.	Dep. Dir.	April 2004	June 2005		Supported by BRCC staff, website manager, research associates, Board Research Committee, Binational Advisory Committee
2.4.2.3 – Develop system for sponsoring an annual symposium or regional scientific meeting	Dep. Dir.	September 2004	March 2005		Supported by BRCC staff and Board Research Committee
2.4.2.4 – Develop a program to recognize scientific achievement in natural history/biodiversity (e.g., awarding medals, appointing Fellows)	Dep. Dir	January 2005	July 2005		Input from BRCC staff, Board Research Committee, and Binational Advisory Committee
2.4.2.5 – Designate an information liaison to Marketing Dept.	Dir. Lib.	Sept 2002	Ongoing		Meet on regular basis with Marketing staff to update them on BRCC activities

2.4.2.6 – Work with Exhibits Dept. to produce in-house research displays	Dep. Dir.	July 2003	Ongoing		Supported by BRCC staff and research associates as well as exhibits staff
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San Diego Natural History Museum

ACTION PLAN

Key Result Area 2: Establish SDNHM as a leading research institution and forum for scientific discussion and cooperation in and about our region.

Planning Leaders: Cato, Deméré

Objective 2.4: Develop the infrastructure to strengthen the research culture of the museum.

Dates of Action Plan: June 10, 2002

Strategy 2.4.3: Develop and implement training and educational opportunities.

Presented:

Approved:

Action Steps	Responsible Person	Starting Date	Scheduled Completion Date	Actual Completion Date	REMARKS
2.4.3.1 – Evaluate interest and need for educational opportunities	Cur. Coll	September 2002	March 2002		Input by BRCC staff, affiliates, marketing, public programs division, Balboa Park museums
2.4.3.2 – Establish a certificate program and initiate a pilot project for parobotany	Cur. Coll., Cur. Bot.	September 2002	March 2002		Work directly with Education Dept., marketing
2.4.3.3 – Develop annual goals for distance learning opportunities	Cur. Coll.	Spring 2002	Review progress annually		Work directly with Education Dept., marketing
2.4.3.4 – Improve and expand internship opportunities	Dep. Dir., Dir. Vol.	Within 1 year of hire	Review progress annually		BRCC staff will work directly with Director of Volunteer Services
2.4.3.5 – Establish postdoctoral positions	Dep. Dir	Within 1 year of hire	Review progress annually		Requires additional funding

San Diego Natural History Museum

ACTION PLAN

Key Result Area 2: Establish SDNHM as a leading research institution and forum for scientific discussion and cooperation in and about our region.

Planning Leaders: Cato, Deméré

Objective 2.4: Develop the infrastructure to strengthen the research culture of the museum.

Dates of Action Plan: June 10, 2002

Strategy 2.4.4: Improve quality of collection care and management.

Presented:

Approved:

Action Steps	Responsible Person	Starting Date	Scheduled Completion Date	Actual Completion Date	REMARKS
2.4.4.1 – Obtain funding and replace antiquated bird cases	Dep. Dir., Exec. Dir.	On going	ASAP		Requires \$300,000+;
2.4.4.2 – Replace inadequate materials used in housing collection	Cur. Coll., Dir Library	On going	Review progress annually		+ individual dept. curators, coll. mgrs; requires additional funding for staff to implement
2.4.4.3 – Review SDNHM collection policy and revise to improve effectiveness	Cur. Coll.	January 2003	June 2003		+ individual dept. curators, coll. mgrs, Dir. Lib.; separate policy for library
2.4.4.4 – Revise procedures to prevent loss of and breakage to specimens	Cur. Coll	January 2003	December 2003		+ individual dept. curators, coll. mgrs
2.4.4.5 – Produce operational manuals for each collection	Cur. Coll., Dir. Library	January 2004	December 2007		+ individual dept. curators, coll. mgrs, dir. library; requires additional funding for staff to implement
2.4.4.6 – Provide in-house training opportunities annually	Cur. Coll., Dir. Library	January 2003	Review progress annually		Library internships ongoing

San Diego Natural History Museum

ACTION PLAN

Key Result Area 2: Establish SDNHM as a leading research institution and forum for scientific discussion and cooperation in and about our region.

Planning Leader: Deméré

Objective 2.4: Develop the infrastructure to strengthen the research culture of the museum.

Dates of Action Plan: June 10, 2002

Strategy 2.4.5: Establish scientific graphics and publications unit

Presented:

Approved:

Action Steps	Responsible Person	Starting Date	Scheduled Completion Date	Actual Completion Date	REMARKS
2.4.5.1 – Develop operational and funding strategy for scientific graphics support (e.g., illustrations, computer graphics, photographs, etc.)	Dep. Dir.	September 2003	December 2003		Input from BRCC staff, Board Research Committee, graphics department, and development department
2.4.5.2 – Hire scientific illustrator/graphics personnel	Dep. Dir.	January 2004	July 2004		Input from BRC staff
2.4.5.3 – Develop operational and funding strategy for editorial support of scientific publications	Dep. Dir.	September 2003	December 2003		Input from BRCC staff, Board Research Committee, and development department
2.4.5.4 – Hire scientific publications editor	Dep. Dir.	January 2004	July 2004		Input from BRC staff

San Diego Natural History Museum

ACTION PLAN

Key Result Area 2: Establish SDNHM as a leading research institution and forum for scientific discussion and cooperation in and about our region.

Planning Leaders: Cato, Deméré, Hollingsworth

Objective 2.4: Develop the infrastructure to strengthen the research culture of the museum.

Dates of Action Plan: June 10, 2002

Strategy 2.4.6: Obtain and expand research facilities and equipment.

Presented:

Approved:

Action Steps	Responsible Person	Starting Date	Scheduled Completion Date	Actual Completion Date	REMARKS
2.4.6.1 – Evaluate facility and equipment needs relative to research priorities and information systems program.	Dep.Dir., BRCC Curators.	Sept 2002	Review annually		Input by BRCC staff, administration. Action step to be coordinated with 2.1.1 and 2.2.1. Evaluation contingent of building renovation completion.
2.4.6.2 – Develop operational and funding strategies to address facility and equipment needs.	Dep.Dir., Exec.Dir.	Nov 2002	Review annually		Input by research team, administration, development
2.4.6.3 – Strengthen partnerships with nearby academic institutions for specialized equipment needs.	Dep.Dir.	Ongoing	Review annually		Molecular lab equipment and scanning electron microscope are currently used under informal partnerships.
2.4.6.4 – Strengthen and develop partnerships with affiliates for facility needs in Baja California	Dep.Dir.		Review annually		Near-border facility to facilitate research material import/export. Field station needs in remote areas for long term research.

San Diego Natural History Museum

ACTION PLAN

Key Result Area 2: Establish SDNHM as a leading research institution and forum for scientific discussion and cooperation in and about our region.

Planning Leaders: Cato, Deméré

Objective 2.4: Develop the infrastructure to strengthen the research culture of the museum.

Dates of Action Plan: June 10, 2002

Strategy 2.4.7: Secure endowment and other funds to support infrastructure.

Presented:

Approved:

Action Steps	Responsible Person	Starting Date	Scheduled Completion Date	Actual Completion Date	REMARKS
2.4.7.1 – Increase number of proposals submitted annually	Dep. Dir.	January 2004	Ongoing		Requires additional staff for grants preparation/submission. Input from BRCC staff
2.4.7.2 – Create stronger working relationship between BRCC & Institutional Development	Dep. Dir., Dep. Dir. Inst. Dev.	June 2003	Ongoing		Input from BRCC and Development staff in a workshop/retreat setting
2.4.7.3 – Pursue endowments with Institutional Development	Dep. Dir., Dep. Dir. Inst. Dev.	January 2004	Ongoing		Input from BRCC staff and Institutional Development. Essential for curatorial positions
2.4.7.4 – Develop licensing and marketing opportunities (e.g., Valentien images, photo images, specimen reproductions, book plate images)	Dep. Dir	October 2003	Ongoing		Input from Retail Operations and Marketing
2.4.7.5 – Evaluate and develop business plans for appropriate revenue generating opportunities (e.g., voucher specimen storage, taxonomic	Dep. Dir.	July 2003	Ongoing		Input from BRCC staff, Board Research Committee, and business management consultant. Requires additional staff to manage large contracts, copyright issues

expertise, mitigation services, assessment services)					and licensing
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