

University of San Diego

San Diego

The San Diego Society of Natural History  
1874-1912

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by

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For Greg

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## PREFACE

On a recent botany field trip organized by the San Diego Natural History Museum, I was excited to see a number of plants named by founders and early members of the San Diego Society of Natural History. Names such as *Dodecatheon clevelandii* (Shooting Star), *Aesculus parryi* (Buckeye), and *Dudleya attenuata orcuttii* (Siempreviva) are familiar to plant enthusiasts today and tribute to a group of individuals who made some of the first scientific surveys of Baja California. As I gathered information for this project, I was intrigued by the personalities behind the founding of the San Diego Natural History Museum. I selected this topic to present a chronology of the founding of the San Diego Society of Natural History, and to describe of a group of pioneers whose work continues to be useful today.

I would like to acknowledge the guidance and support of individuals and organizations who have helped me throughout the research for this project.

The staff (both present and former) of the San Diego Natural History Museum have provided access to material stored at the museum. Ann Payne, Carol Barsi and Billie Meeder of the Museum's Scientific Library assisted in the examination of documents, photographs, and artifacts relating to the history of the Society of Natural History. Judy Gibson helped with plant names and biographical information on botanists. Tom Demeree, Geoff Levin, Reid Moran, and Phil Unitt provided information about research done and methods used by museum scientists over the years. Rich Benard provided samples of the official seal of the San Diego Society of Natural History. Mike Field, Sandy Shaw, and Jim Melli offered advice for preparing the pictures. Mary Clark and Mick Hager gave me encouragement about the importance of preserving the early history of the Society as the museum continues to grow and change for the future.

Sally West and Rick Crawford of the San Diego Historical Society assisted in unearthing information in their archives, and were very gracious about numerous inconveniences I caused them.

Wilbur Shigehara of the National Weather Service provided insight into the history of weather observation in San Diego county, and was helpful in assessing conflicting reports of rainfall and anomalous weather conditions compiled by early observers.

Finally, I wish to express my gratitude to the members of my thesis committee for their guidance. Dr. Iris Engstrand directed my attention to the importance of "nature reporters" in nineteenth century America, and helped to evaluate the research. Dr. Brandes encouraged my interest in the personalities that made the Society such an interesting institution in San Diego history. Both were very helpful in reviewing my progress.

# Introduction



This thesis describes the founding of the San Diego Society of Natural History, and how specific individuals and the activities of the society led to the establishment of the San Diego Museum of Natural History. The San Diego Society of Natural History was founded by strong-willed individuals who were personally but not professionally interested in nature discovery. Because the regions of San Diego and Baja California were largely unstudied by scientists in the late nineteenth century, early members of the Society were able to find and name several species of plants and marine animals. This exciting period in nature study coincided with the development of San Diego's New Town, and founders of the Society were also actively involved with establishing San Diego as a successful city. Once formed, the San Diego Society of Natural History experienced periods of success, economic hardship, ideological discord, and readjustment. The Society has now existed for over 100 years; the San Diego Natural History Museum today is evidence of the dedication of the founders and members.

Themes of this paper include the founders' social environment, involvement of the Society in the San Diego community, and biographical sketches of individuals who were significant in the development of the Society.

Chapter 1 is an overview of the formal study of nature. It describes how nature study became a component of popular culture during the eighteenth century, and how the Society of Natural History is a product of that cultural element.

Chapter 2 describes how the San Diego Society of Natural History came to be created in 1874 by nine amateur naturalists. Central to this chapter are Daniel Cleveland, who organized the Society, and George Barnes, who was the first president of the organization.



Chapter 3 tells of the first years of the Society, 1875-1879. The emphasis of this chapter is the creation of committees to accomplish specific goals and perform community projects, such as weather observation stations.

Chapter 4 details the activities of the Society as it prospered during the years 1880-1888. During these years individual scientists propelled the Society forward through their work and their participation in regular meetings. Particularly important during these years was the guidance of scientist Charles Parry who encouraged the Society with his suggestions for their success.

Chapter 5 covers the years 1889-1912 and describes a time of change and readjustment for the Society after the resignation of George Barnes as president. The chapter ends with the opening of the first museum exhibits in the Hotel Cecil.

Chapter 6 provides a brief overview of the various facilities occupied by the Natural History Museum as it became established in its present home in Balboa Park.

The San Diego Society of Natural History came into being when San Diego was a young city, and the growth of the Society occurred in conjunction with the development of New Town. The Society that started almost forty years before opening their first museum molded the character and personality of the institution that is an important part of San Diego today.

Official Seal of the San Diego Society of Natural History, produced August 1886. The seal bears the profile of George W. Barnes, the first president of the Society and who served as president from 1874-1888. From the archives of the San Diego Natural History Museum.

# CHAPTER 1

## The Study of Nature



The San Diego Society of Natural History has existed for over 100 years. The Society's presence is best known today because of the San Diego Natural History Museum in Balboa Park. For forty years before the Museum was founded, the San Diego Society of Natural History functioned as an organization of nature enthusiasts pursuing nature study as a hobby. This thesis tells the story of how the San Diego Society of Natural History was formed in 1874, and how the Society came to create a lasting San Diego institution — the San Diego Natural History Museum.

The individuals who began the San Diego Society of Natural History were motivated by popular interest in the study of nature commonplace during the later part of the nineteenth century. During this time, scientists and traditional scholars were not alone studying nature. All kinds of people were curious about plants, animals, rock formations, the weather, and many other features of the world. Common people felt that they could understand nature's mysteries and even become experts in scientific subjects. Especially in the fields now defined as botany, geology, paleontology, and general natural history, there was a general outlook that one did not have to be trained in the science of observing nature and collecting specimens. Through nature study and discussion with others, people educated themselves beyond what they could learn in school or from available books. A brief overview of the history of the academic study of nature is useful in understanding how the nineteenth century view of nature influenced the founders of the San Diego Society of Natural History.

Over two thousand years ago, before the formal science of classifying organisms was developed by the earliest naturalists, study of local plants and animals was a commonplace activity. People "studied" nature for survival because resources for food, shelter, tools, and general livelihood came from their local environment. Formalized nature study began with Greek scholars, especially the empirical observers

Hippocrates (460-377 B.C.) and Democritus (465-370 B.C) who were among the first to document their work in naming animals. Aristotle (384-322 B.C.) is thought to be the first person to incorporate the knowledge of his time and begin a systematic approach to nature study. While Aristotle did not devise a formal classification system, he established the principle that animals may be grouped according to the way they live, their actions, and their physical construction. This fundamental organization provided the basis for detailed classification systems developed much later. Aristotle's logical groupings were used for nearly two thousand years by those who studied animals.<sup>1</sup>

During the sixteenth and seventeenth centuries there was significant refinement of the concepts and techniques for classification of animals and plants. Important progress was made in the field of botany, where the first break with Aristotelian tradition occurred as naturalists attempted to describe and classify local plants. Zoologist John Ray (1627-1705) perceived the difference between genus and species, and evaluated both similarities and dissimilarities in animals to define more detailed classifications. Swedish naturalist Carolus Linnaeus (1707-1778) made such significant contributions in classification systems that he has been called the father of taxonomy, which is the systematic classification of plants and animals. Linnaeus' system of binomial nomenclature assigned a double name which consisted of the genus and species, for example, *Ananas comosus* for the pineapple.<sup>2</sup> Binomial nomenclature was based upon the study of local plants, and characterized by a clearly defined diagnosis of a species. Although Linnaeus' methods were not original, his practical system was easy to understand and adapt. His system could be applied to both plants and animals and therefore became the foundation of systematic zoology. Binomial nomenclature dominated taxonomy for the next century, and most of the essentials of the Linnaean method are components of modern taxonomy.<sup>3</sup>

As methods of classification became increasingly well defined, more exploration was undertaken to find new species of plants and animals. Grand expeditions all over the world brought back many examples of new species and studied specific populations of animals and plants in great detail. Charles Darwin (1809-1882) became one of the most famous naturalists because of his observations and data collected during the voyage of the *Beagle*. His experience as a traveling

naturalist and his study of Thomas Malthus's *Essay on Population* are noted as leading to his theory of evolution.<sup>4</sup> Darwin also addressed the probable cause of evolution, which he described by his theory of natural selection. At the same time, another traveling naturalist, Alfred A. Wallace (1823-1913) came simultaneously to the same conclusions. Darwin and Wallace presented their theories jointly to the Linnean Society in 1858 and in so doing changed the course of history of science.<sup>5</sup>

Popular interest in science is a result of the social changes which occurred during the mid-eighteenth century Enlightenment.<sup>6</sup> In addition, general acceptance of Darwin's concept of the evolution of species encouraged nature study. The cultural climate that developed during this long period of time produced people who felt they could exert control over their own lives and fortunes, as opposed to their ancestors who lived with fatalist assumptions about their existence.<sup>7</sup> Over time, individuals came to study nature as an avocation, for the sheer joy of acquiring useful knowledge and sharing their observations and speculations about nature with others.

As new discoveries of higher animals and common plants dwindled near the end of the nineteenth century, the focus of nature study tended toward careful refinement of categories to identify new types within existing species. Classification methods were understood by a growing number of people, leading to a race to name the shrinking number of new finds. Nature scholars of all kinds, both professional and amateur, participated in this race. Many non-scientific people followed with avid interest the progress of naturalists who published their findings. Hobbyists included a wide range of people, from farmers to businessmen with a love for the outdoors. By studying the details of their local area, nature enthusiasts could often notice plants and insects specific to their locality and previously undescribed. Plant lovers experimented with propagation techniques and hikers made detailed notes and observations. Although amateur naturalists did not necessarily document and publish their work, observation and discussion took place constantly. As an extension of these activities, clubs and societies were formed by people with mutual interests who wanted to share their observations and techniques.<sup>8</sup>

This sort of self-determined naturalist is aptly described as a

“nature reporter” by author David Scofield Wilson. His book *In the Presence of Nature* describes nature reporters and how this genre of people evolved during the eighteenth century. To illustrate his concept, Wilson compares nature reporters to modern journalists in that they collected raw data at home and in the field, and then brought their observations and stories to others through writing and discussion. He states:

More often than not they were self-educated in the methods and techniques of their craft and only marginally or selectively acquainted with the philosophy and theory that justified their activity.<sup>9</sup>

Their discoveries were made through personal experience with collecting, observations of their environment, and discussions with others. Nature reporters were eager to hypothesize how and why natural events occurred. Widespread study of nature also contributed to perpetuation of misinformation too, as some observations and hypotheses were often far from the truth.

Western traditions in nature study began in Europe and evolved after they were brought to America by the colonists. Wilson observes that the tradition of nature reporters in America evolved differently from their European contemporaries in several ways. Wilson notes that for American settlers, understanding the environment was more than just a challenging academic problem. Understanding the plants, animals, terrain, of this unfamiliar country was vital for their survival.<sup>10</sup>

Wilson also describes the character of these colonial nature reporters in terms of how they communicated their observations. Detailed accounts written in a personal way were common, with the author addressing the reader directly and offering free speculation about the importance of his observations. The accounts were apt to be full of digressions and humorous asides. For example, Wilson states:

They group anecdotes, tall tales, particular observations, personal narratives, speculation, moral indignation, and humor together with Indian glossaries, maps, and catalogues of plants and animals as if all were equally acceptable forms by which to convey what they had gathered. In this they demonstrate the unsettled state of nature study in the eighteenth century.<sup>11</sup>

Although their records seem unscientific and largely unimportant by modern standards, they show the enthusiasm and enjoyment these individuals felt for their avocation. Wilson indicates personal satisfaction was a primary reason these men continued their work with diligence and pride. Nature reporters delighted in displaying knowledge gained from their personal experiences, and the scientific exchange provided an excellent medium for telling of their adventures in the wilderness.<sup>12</sup> For the more systematic collectors there was the added motivation that new discoveries might be confirmed. Linnaean nomenclature provided that the name of the discoverer be maintained forever in the name given to a new species, and such recognition was prized by amateurs and professionals alike.

In Wilson's view, the nature reporters are significant in American culture not because of overwhelming scientific achievements, but because of the way they reported their observations and made nature a part of popular culture. These individuals inculcated the inherent value of their work and thereby influenced future generations to continue. He writes:

The nature reporter was more than a scientist. He legitimated and domesticated as well as described American nature. Take cultural significance as the criterion instead of scientific worth and a new picture emerges. Hundreds, not tens of Americans retrieved and organized data, digested experience, devised technical innovations, published their thoughts, persuaded others what to feel, taught thousands what to value in America's physical and biological environment...Though science had to struggle to survive in colonial America, nature reporting thrived.<sup>13</sup>

The colonial American nature reporters described by Wilson are the predecessors of the naturalists essential to this story.

The founding of the San Diego Society of Natural History is a prime example of nature study traditions adapted for life in America. The men who formed the San Diego Society of Natural History in 1874 were a product of cultural traditions begun in eighteenth-century Europe and specialized by colonial Americans. The Society they formed was an expansion of their individual desires to study nature and was a reflection of the current culture in the United States.<sup>14</sup>

Researchers today at the Natural History Museum follow

Systematics in their study, as they have since the Society was begun. In recent years the scientific study of nature has turned to the molecular level. This trend is evident in the large number of biotechnology firms and molecular biology curricula available today. Although Systematics as a method of study is unfashionable today, it is important in order to document how species constantly change. The building and maintenance of collections is vital to on-going study. In the Society's current efforts, it continues the work and supports the goals of its founders.

The Society of Natural History established by early San Diego's nature enthusiasts provided the basis for a formal institution for scientific research. These people were transplanted from other places, and brought the traditions of study and interest in nature with them. Because the area around San Diego was largely unexplored, there were ample opportunities for collectors to find new species and make a real contribution to the study of the area. The chapter that follows describes how the Society became established.



## Notes



1. Ernst Mayr, et al. Methods and Principles of Systematic Zoology (New York: Maple Press, 1953), pp.5-7.
2. Webster's New Universal Unabridged Dictionary, 2nd ed., 1983.
3. Mayr, Methods and Principles, pp.7-8.
4. Although the name Darwin has become synonymous with evolution, evolutionary thought was already widespread during the eighteenth century. It was through the work of field naturalists such as Darwin and Wallace, that evolutionary principles were observed in nature, documented, and provided a firm foundation for lasting evolutionary theory. Ibid. p.7.
5. Ibid. pp.9-11.
6. The Enlightenment referred to here is the movement that gradually took shape in individual minds over several generations before being acknowledged as a movement in the late 1740s. Generally, changes in thinking that began during the Renaissance became focused during the period referred to as the Enlightenment, and were characterized by man's unlimited confidence in his future and in his ability to affect his future. A thorough discussion of the Enlightenment and its implications for the men forming the San Diego Society of Natural History is beyond the scope of this work. The Enlightenment, however, is mentioned briefly to explain how popular thought evolved to produce individuals interested in nature study.
7. Fatalist assumptions are a product of Christian ideology which was essential to the development of western thought. The coming of Evolutionism challenged Christian ideology, but was eventually successful because of changes in popular thinking due to gradual emancipation from traditional roles in religion, philosophy, and politics brought about by the Enlightenment. Ernst Mayr, The Growth of Biological Thought (London: Belknap Press, 1982), p.301.
8. Lester G. Crocker, ed., The Age of Enlightenment (New York, 1969), p.3.
9. David Scofield Wilson, In the Presence of Nature (Amherst: University of Massachusetts Press, 1978), p.5.
10. Wilson, In the Presence of Nature, p.14.

11. Ibid. p.22.
12. Ibid. p.27.
13. Ibid. p.29.
14. The period was characterized by the popularity of such institutions as the Royal Society of London, Paris Academy of Sciences, and the American Philosophical Society. Lester G. Crocker, ed., The Age of Enlightenment (New York: Walker,1969), p.3.



George W. Barnes  
1874-1888



Daniel Cleveland  
1888-1890, 1893-1904



B. F. McDaniel  
1890-1893



Anthony W. Vogdes  
1904-1920



Fred Baker  
1920-1922



Joseph W. Sefton, Jr.  
1922.

PRESIDENTS OF THE SAN DIEGO SOCIETY OF NATURAL HISTORY

Presidents of the San Diego Society of Natural History, 1874-1924 as of October 1924.

## CHAPTER 2

# A Society for Natural History



The story of the San Diego Society of Natural History begins with the arrival of Daniel Cleveland in San Diego. Cleveland traveled from San Francisco to San Diego in 1869 to be with his brother William, who was seriously ill. He sailed south on the steamer *Orizaba*. Most of the passengers went ashore at Santa Barbara and Los Angeles, but twenty-five individuals were bound for San Diego. Aboard ship Cleveland became re-aquainted with Alonzo E. Horton, whom he had met previously in San Francisco. He also met Joseph Nash, a pioneer merchant in the new San Diego and the Reverend Charles Russell Clark, a San Diego teacher. Cleveland was introduced to San Diego by these men, who were shaping the new city, the most important of whom was "city father" Alonzo Horton. Horton talked of the success he had already experienced selling lots in "Horton's Addition" to people in San Jose and San Francisco and in doing so sparked the enthusiasm of his traveling companions.<sup>1</sup>

Cleveland was inspired by Horton's enthusiasm and imagination in devising the things that would make the new San Diego successful. It seemed that Horton had thought of everything from railroads and the development of San Diego Bay, to the new city hall, courthouse, and the hotel "Horton House." Cleveland recalled later that success for the enterprise was not surprising considering Horton's ability to communicate his vision and to convince people to join his business venture. New landowners were making their way to San Diego each month, and Cleveland himself became interested in participating in such a promising venture.<sup>2</sup> By the time Cleveland landed at San Diego, he was prepared to look at the new city with eyes toward the future.

Daniel Cleveland decided to stay in San Diego after William Cleveland regained his health. Although Daniel had previously

planned to make his permanent home in San Francisco, business opportunities in San Diego compelled him to stay and take his place with Horton, Nash, E.W. Morse, and others shaping the growing city. Daniel Cleveland established a law practice where, over the years, he became deeply involved in real estate litigation. With his brother, he amassed a large parcel that became known as Cleveland's Addition. He, along with other individuals, helped Alonzo Horton form the Horton Library Association. In June 1870, Daniel Cleveland, William Cleveland, Joseph Nash, Alonzo Horton, and others, started the Bank of San Diego, which continued until 1878.<sup>4</sup>

Daniel Cleveland was also an amateur botanist and avid plant collector. Although he was not physically robust, he spent as much time as possible botanizing in the chaparral foothills near San Diego. He was especially interested in ferns and sages, and over the years several species of plants were named for him.<sup>4</sup> As early as 1870 he mailed specimens he had collected to Harvard University for identification. This was the beginning of a long correspondence with Dr. Asa Gray of Harvard.<sup>5</sup>

Cleveland's interest in plants was fueled by the large numbers of species in this region that were unfamiliar to him.<sup>6</sup> Several of Daniel's new friends in San Diego were also nature enthusiasts. They often enjoyed informal discussions about the unique flora and fauna they had seen in the region. One such friend was Oliver Sanford, who worked as a surveyor and independently collected beetles and corresponded with other collectors in the East.<sup>7</sup>

Cleveland and Sanford decided to form a society devoted to discussions about natural history. They called a meeting in Cleveland's law office for the evening of October 1, 1874, and invited several of their business colleagues and friends who shared their interest in nature. With nine men present they officially formed a new society called the San Diego Society of Natural History.<sup>8</sup> The first order of business was to appoint a committee of two, Cleveland and Hendrick, to draw-up articles of incorporation. The group resolved to meet again one week later, on October 8th.<sup>9</sup>

The men were deliberate in their efforts to create an academic sort of society, focused primarily on observations of their surroundings.

This was not to be a social club, but an association of individuals devoted to the study of natural history, and inclined toward making significant scientific contributions. These men did not claim to be anything other than amateur naturalists, but this is not to say that they were not interested in making valuable contributions to science.

When the San Diego Society of Natural History was formed, the surrounding region was largely unexplored by scientists. The only formal study was a border survey completed in 1850. A large number of new species of plants, shells, and marine animals waited to be collected and named. When the history of this period is evaluated today, the importance of that early collecting work is evident.

With so much to be discovered about the natural world, especially in the San Diego region, amateur collectors could often find and name new species. As amateurs, they were forced to rely upon professional scientists around the country, usually at the leading universities, to identify the material and decide which specimens represented items not yet named. Under the auspices of the Society, members corresponded with scientists and other naturalists. This interaction with professional scientists played an important role in the function of the Society. Not only did professionals help to identify and name specimens collected, but they also provided advice on how to proceed.

In creating a formal society for natural history study, the men were able to benefit through collaboration on any topics that interested them. For example, Daniel Cleveland was the local expert on plants of the region, and George Barnes knew more about chemistry and life science. While each man had his own special interest in nature, they were all generally interested in learning about all aspects of nature.

The incentive then for creating a society lay not only in establishing a club for hobbyists, but more importantly to share information, especially observations of local phenomenon and techniques for collecting. The nearest scientific institution was the California Academy of Sciences in San Francisco. With no local institution to study Southern California, it made sense for these men to form their own society to support their work and help them develop their interests.

So, the initial meeting of the San Diego Society of Natural History established the desire and intent of these men to form their own scientific society. A second meeting was held on the appointed day, one week later. The men commenced business without delay. Charles Coleman acted as secretary. Draft articles of incorporation were presented by Daniel Cleveland and E.W. Hendrick. The articles were discussed by the group and minor additions were made to the text. Oliver Sanford was appointed to execute and file the articles of incorporation with the City. Then, the first election of the Society was held by ballot to name the Directors. They were: George Barnes, Daniel Cleveland, Charles Coleman, Oliver Sanford, and E.W. Hendrick. Barnes, Hendrick, and C.J. Fox (a new recruit) were appointed to draft a constitution and bylaws and to have them ready for the next meeting.

The day before Articles of Incorporation were filed, a representative from another natural history society in San Diego raised his voice in protest. In an open letter published in the San Diego Union, G.N. Hitchcock of the San Diego Natural History Society addressed Sanford on the problem of the similarity of the two names.<sup>10</sup> Hitchcock, a local physician and nature enthusiast, claimed that the previous year he along with Henry Hemphill and others formed the San Diego Natural History Society. He claimed that their society had weekly meetings and that Sanford had even attended them (although he states that Sanford's name does not appear in the records of the meetings), so Sanford could not plead ignorance of the other natural history society. Hitchcock complained that Sanford had no right to start another society with an almost identical name and stated purpose. He demanded a public meeting to decide whether it would be best for San Diego to have one or two societies of this sort. Hitchcock concluded his letter stating that he made this communication through the press so that all of San Diego would be aware of the trouble caused by a new society attempting to supersede another, and worse, appropriating its name. Hitchcock's indignation was apparently ignored by Sanford and his cohorts, as well as the rest of the city. On October 15, 1874 the filing of the articles of incorporation was announced in the San Diego Union.<sup>11</sup> The two societies never joined together formally, although several members of the earlier Society came to be associated with the San Diego Society of Natural History at different times.<sup>12</sup>

The following week, the third meeting was held at Daniel Cleveland's office. Charles Coleman acted as chairman and George Barnes as secretary. The minutes from the previous meeting were read, appended, and affirmed. Sanford reported that the articles of incorporation had been duly executed and filed. The draft constitution and bylaws were presented and discussed. The stated purposes of the Society were expanded at this point. The purpose statement read:

The object of the society shall be the study of nature, the acquirement and diffusion of scientific knowledge and the collection and preservation of materials pertaining thereto.<sup>13</sup>

The men had decided to expand their stated purpose beyond just the study and discussion of nature to assume a responsibility to educate others about their work and to actively collect and preserve materials collected. This addition to the original purpose of the Society provided the basis for a future museum. It is unclear from the written record if these men truly foresaw what they proposed with the expanded statement, but it is clear that they took themselves very seriously as an important addition to the city, and that they were creating an institution to last indefinitely.

With the object statement complete and all the other parts of the constitution and bylaws agreed upon, it was decided that Sanford should procure blank books for recording the finished version, and to provide a place for signatures upon approval by the directors. The Society had become official.

From the very beginning meetings were conducted in an orderly fashion, minutes were written in a leather-bound ledger, and important issues were put to vote. By the beginning of November the new society had its fourth meeting. The men continued to meet in Daniel Cleveland's office. The Secretary was authorized to procure one half of a ream of printed letter head paper which could be used by the members at their cost. An election was held, and George Barnes was elected president. Then new names were proposed for membership. The following men were proposed: R.R. Morrison, A. Gordon, F.L. Nash, W.A. Begole, D.J. Phillips, Hiram Mabury, George Hickey, E.F. Spence, T.C. Stockton, Rev. J.F. McFarland. The Society had endured its infancy and the business of studying of natural history could now begin.<sup>14</sup>



That George Barnes was elected president of the young society may seem surprising considering that Daniel Cleveland was the man who formed the society and provided his office as meeting place. It is likely that Cleveland felt burdened by the number of activities in which he was involved and that he would rather study nature than be burdened by administrative responsibilities. Barnes was better suited to the job because he was not so busy and was enthusiastic about the task of organizing and motivating the group.<sup>15</sup>

George Barnes was a quiet bachelor and a doctor of homeopathic medicine.<sup>16</sup> Born in Frederick County, Virginia in 1825, he graduated from Cleveland Homeopathic college in 1851. Barnes had lived in Mt. Vernon, Ohio, where he practiced homeopathic medicine for fourteen years. In 1865 he became a professor at the Cleveland Homeopathic Hospital College. After three years his health failed, possibly due to overwork, and he was forced to resign his position. He traveled to California in 1870 in search of a better climate. After a year of considering the area, Barnes decided to locate his practice in San Diego.<sup>17</sup>

Several years after moving to San Diego, Barnes suffered an injury to his spine after he lost control of the horse he was riding. He never fully recovered from his fall and as a result had to limit his practice, seeing only patients who could come to his house. In rare instances he was carried to where the patient lay. Despite his injury and chronic ill-health, Barnes was described as a man of "vital force." His strong character is cited in official biographies, and it is evident that he was distinguished member of the Homeopathic medical community.<sup>18</sup>

Barnes also had an interest in the study of natural history. His article entitled "The Hillocks and Mound Formations of the Pacific Coast" was reprinted in several magazines and read with popular interest. He was well-liked and respected by members of the Society of Natural History. Annual addresses written by Barnes show careful consideration and attention to the work of the Society during the preceding year.

With Barnes as president the routine of the Society quickly took shape. Members were eager to expedite administrative duties required at meetings and get on with the business of discussing sci-

ence and nature. At the fourth meeting, reading of minutes was omitted and the election of new members was rushed. The highlight of the evening was the presentation of "zoology specimens" (possibly local animals, preserved).<sup>19</sup>

The next week, after the fifth meeting, the evening proceeded according to the original plan. The minutes were read, new members were elected, and new specimens were presented. After that, George Barnes read a short essay about the wild coffee plant and displayed a specimen.<sup>20</sup> By the end of November the Society voted to establish Friday evenings at 7:00 as the regular meeting time.<sup>21</sup>

The first meeting of the Board of Directors was held at the beginning of December. George Barnes was appointed to make inquiry regarding cabinets of bookshelves for the Society. Even though the group had only met a few times so far, donations to the collection and library were already growing. The Society already had to think about preservation of its collection. The treasurer was authorized to purchase a half pound of chloral hydrate to be used in the preservation of zoological specimens. The Board also discussed publicity for the Society. Daniel Cleveland was appointed to prepare and have printed a circular to promote the Society.<sup>22</sup>

Logistical concerns of the Society such as meeting facilities, supplies for preservation and correspondence were addressed more in meetings of the Board of Directors than during regular meetings. Members were primarily interested in the scientific discussions. Often, reading of the minutes was omitted to allow more time for presentations and discussion.

At the last meeting in November 1874, Oliver Sanford read a paper before the San Diego Natural History Society on the subject of beetles. The lecture was accompanied by an exhibition of specimens described, which had been collected by Sanford. The full text of the lecture was printed in the San Diego Union, no doubt placed there to interest others in joining the society.<sup>23</sup>

Publicity was important to the young society. A letter to the editor of the San Diego Union told of how the Society was increasing in membership and had many valuable items. The author of the letter

wanted to present a report of the progress and prosperity of the newly-formed scientific organization. He wrote "in the short time since our organization, our membership has increased from ten to more than thirty," and he listed numerous books and other donations received. The letter concluded with a statement that the Society would be glad to receive any natural history specimens.<sup>24</sup>

The last meeting of 1874 was held the week before Christmas. Sanford read a second paper on beetles in addition to regular meeting business. The Society was progressing rapidly toward its goals, and ready to begin its first full calendar year of incorporation.<sup>25</sup> The year 1875 would bring the Society to great heights.

## Notes



1. Daniel Cleveland wrote a series of articles for the San Diego Union telling about his early days in San Diego. The first article in the series details his arrival in San Diego. San Diego Union, Nov. 29, 1925.
2. Ibid.
3. Anonymous, "Daniel Cleveland: San Diego Patron," The Journal of San Diego History, XI (Jan., 1965), p.34-35.
4. The fern *Cheilanthes clevelandii* Eaton, and the sage *Audibertia clevelandia* Gray are named for him. Willis Linn Jepson, ed., "Botanical Explorers of California," Madroño, I (1916-1929), p.267.
5. Carroll DeWilton Scott, The San Diego Society of Natural History, 1874-1924 (San Diego: Society of Natural History, 1924), p. 6.
6. Cleveland informed the society that he sent more than seventy specimens from San Diego to Dr. Gray of Harvard, who was focusing special attention on marine plants (algae). San Diego Society of Natural History, Minutes of Meetings of Society, Dec. 11, 1874. (Handwritten.) (Hereafter all references to Minutes of the Society will be noted as SDSNH, Minutes with the date.)
7. Oliver N. Sanford was a prominent San Diego citizen. He arrived in San Diego in September 1872 to work with the Texas Pacific Railroad. He purchased land and lived in El Cajon. He held the office of City Engineer from 1882 until 1889. During his administration the first graded streets, the first paved streets, and the first sewers were installed in the city. An Illustrated History of Southern California (Chicago: Lewis Publishing Company [1890]), pp.310-311.
8. The men were: L.L. Roberts, E.W. Hendrick, Charles Coleman, William Allen, George Barnes, Oliver Sanford, Daniel Cleveland, L.B. Wilson, and J.B. Wells. SDSNH, Minutes, Oct. 1, 1874.
9. SDSNH, Minutes, Oct. 1, 1874.
10. Open Letter, San Diego Union, Oct. 14, 1874.
11. Announcement, San Diego Union, Oct. 15, 1874.
12. Many of the members of the older natural history society were medical

doctors of the community. Their expectations for a natural history society were much different than those of Cleveland and the men who started the new Society. The doctors displayed a degree of chauvinism about including just anyone with an interest nature in a scientific society. Although George Barnes was a doctor, his degree was earned at a homeopathic college, rather than a medical college, and is often not mentioned in discussions of doctors in early San Diego. Although I have not seen explicit statements indicating bias, the aggregate of material including newspaper articles and general writing about early San Diego leaves the impression that the medical community of San Diego considered themselves to be educated professionals apart from others in the community.

13. SDSNH, Minutes, Nov. 2, 1874.
14. Ibid.
15. Throughout the body of material available are references to Cleveland's love of research and collecting and his disinterest in administrative responsibilities. Barnes, on the other hand, was inclined to motivate the group with his ideals about the potential of the Society. As President he attended meetings regularly and kept them running smoothly.
16. San Diego Union, Dec. 12, 1882.
17. T.S. Van Dyke, The City and County of San Diego (San Diego: Leberthon & Taylor, 1888), p. 170.
18. Ibid. p.171.
19. SDSNH, Minutes, Nov. 11, 1874.
20. SDSNH, Minutes, Nov. 16, 1874
21. SDSNH, Minutes, Nov. 27, 1874.
22. SDSNH, Minutes, Dec. 1, 1874.
23. SDSNH, Minutes, Dec. 2, 1874.
24. San Diego Union, Dec. 3, 1874.
25. Ibid. Dec. 18, 1874.





Daniel Cleveland, organizer of the San Diego Society of Natural History, and President of the Society 1888-1890 and 1893-1904. From the archives of the San Diego Natural History Museum.

## CHAPTER 3

### The First Years of the Society, 1875-1879



For the first few months of 1875, the San Diego Society of Natural History met every week. Society members were serious about building a credible society, devoted to furthering science through their field work and correspondence with naturalists in other parts of the world. These people were interested in advancing science and being involved, and had little regard for any historical motivations or social implications of their efforts. The men did not meet to deliberate about the war between religion and science,<sup>1</sup> but rather to understand their surroundings.

Of immediate concern was the need to find a place to store the large number of donations accumulated at each meeting, but the members wanted to devote as much time as possible during regular meetings to the discussion of natural history topics. To accommodate this desire, the Board of Directors met separately in addition to regular meetings to take care of logistical problems such as when and where regular meetings should take place, the procurement of supplies, and other administrative necessities.<sup>2</sup> The first years saw success in molding a society that would grow and evolve for many years to come.

Weekly meetings of the Society followed a pattern that changed little from one time to the next. In the course of a typical meeting, the five or so members in attendance conducted routine business first, including reading the minutes of the previous meeting, reading correspondence, and nominating new members. Donations for the evening were then described and displayed. With the business complete, someone presented a topic for the evening. After the lecture there was discussion, and when the topic was exhausted, the group voted to adjourn. A designated secretary took notes during the meeting, and



later the minutes were transcribed in pen into a leather ledger. Sometime during the week following a meeting, the San Diego Union printed a report based on the official minutes.

The first full year for the Society was 1875, and meetings resumed promptly after a break for the holidays. Society president George Barnes brought his enthusiasm to meetings, setting the tone for the evening. Barnes' personal interests included a diverse range of topics. If there was nothing prepared to be presented about the local area, he might provide a lecture or lead a discussion on a topic such as ozone, wild coffee plants, medical research, oxygen, or some other topic of general interest. The first presentation of the new year was an essay about the honey bee, and was read aloud to the group.<sup>3</sup>

In March 1875, the Society nominated a group of women to be associate members of the Society.<sup>4</sup> A unanimous vote approved their admission, and was the first step towards full participation by women in Society activities. Over the years the Society would count among its full members women who became prominent naturalists in their own right. The most notable of these were Rosa Smith Eigenmann and Kate Sessions.

By the middle of March 1875, the San Diego Society of Natural History had become known in "intellectual" centers of the United States, as well as in San Diego. Abstracts of the meetings had been published in the scientific column of the New York Tribune.<sup>5</sup> The Society actively sought such opportunities to become known outside the San Diego region. At meetings, members were certain to report any correspondence with scientists in other regions. Correspondence was received from places ranging from the Maryland Academy of Science to the California Academy of Science in San Francisco.<sup>6</sup> During this time, the society began a series of correspondence with individuals throughout the United States and Western Europe. Many of these correspondents were personal acquaintances of Society members from their home towns.

By April 1875 there were twelve regular members and four associate members. Despite the Society's rapid progress, George Barnes was intent on maintaining forward momentum. He addressed the Society on its origin and progress so far, and reviewed its goals and objectives. He spoke about the favorable recognition the Society had

begun to receive from other associations, and emphasized the duties and responsibilities of Society members. An account of the address was published in the San Diego Union for publicity. The Society wanted to encourage new members and draw people who were truly interested in the purpose of the Society.

Committees were formed during the first year to accomplish several specific goals. At a meeting in March 1876, members decided that the Society must find regular rooms to rent for meetings and to store the collections and books. A committee was appointed to work on the problem. A few weeks later, the Rooms Committee reported success in securing a room in the Commercial Bank building with a lease for one year.<sup>7</sup> In addition to being a meeting place and storage facility, the room also provided a place for members to perform necessary preservation work on the specimens. The space allowed them to keep their supplies close at hand. Alcohol, chloral hydrate, pins, paper, glue, and ink were now ready for use whenever they were needed.

Not all members of the Society were in favor of the new room, however. Daniel Cleveland raised his voice in opposition to committing the Society to pay rent. He anticipated that the Society would succumb to financial problems if members were not circumspect about such commitments. In this instance, as in many in times to come, he resisted letting the Society assume unnecessary financial risks. He much preferred the Society to be free of financial obligations, using facilities donated by the members.<sup>8</sup> Cleveland's conservative approach to the financial matters of the society did not reflect the popular opinion of the membership. The Society rented the room, and in the short term did not seem to suffer financially. Many years later, however, Cleveland's predictions would prove to be correct.

The most active committee in the first years was the Meteorological Committee. It produced one of the most significant and interesting projects of the early years, organizing widespread weather observation in San Diego county. J.B. Wells, the head of the Meteorological Committee was employed by the Signal Service performing weather observations. He was very interested in attempts to predict the weather, and understood the scientific value of obtaining daily observations from several locations in the area. Because there were few places where regular data were taken, he devised a plan

whereby Society members would volunteer to make weather observations at various places throughout the county. The information gathered by the volunteers would prove to be invaluable to climate study of the region.

Topics related to the weather and natural events were some of the most popular subjects of discussions at meetings. Although the San Diego climate is mild and unvaried compared to most other parts of the United States, the climate was still of popular concern. People moving to San Diego had to become accustomed to local weather patterns of intense heat and dry spells, periodic torrential rain, atmospheric haze "ozone",<sup>9</sup> fog, earthquakes, and the like. People attempting to establish San Diego as an ideal community wanted to get the most publicity possible for the numbers of days of sunshine, ozone, and the lack of cold or inclement weather. Just as people are interested in the weather in modern times, it seemed that everyone wanted to find ways to predict the weather. Weather observation was a logical first step to understanding local climate patterns. Even though the weather in San Diego changed little from one day to the next, occasional storms and earthquakes could be devastating. Perhaps the daily "predictability" of the weather encouraged these men to believe that an easy method for predicting the weather must be possible to find.

There have been official United States Government records of weather observation in San Diego since July 1, 1849. For the first twenty years after 1849, records were made under the supervision of the Medical Corps of the Army. The first year of official observations were made at the San Diego Mission de Alcalá. The Post Surgeon had the responsibility to record the temperature and overall weather conditions.<sup>10</sup> This arrangement continued until instruments and records were transferred to the Signal Service in 1870. On February 9, 1870 the United States Congress assigned responsibility for forecasting storms on lakes and seacoasts to the War Department. The Army Signal Corps was given these new duties as well.

Weather stations were built and staffed in places throughout the United States, several reaching into frontier areas. The weather stations were connected by telegraph lines so that weather information could be sent to the headquarters in Washington. Frontier telegraphs to places like San Diego were started in 1873. By 1878, the

weather bureau in Washington received eight weather reports a day via telegraph from weather bureaus across the United States.<sup>11</sup>

After the Army Signal Corps took charge of weather services in San Diego, observations were made at the "H" [Market] Street barracks. The Signal Service was established in Horton Square, later changing to the site of the Union building, then to the corner of 5th and "D" streets, and again to 5th and "F" streets.<sup>12</sup> On June 25, 1875 an article appeared in the Daily Union stating:

All of the operators in charge of telegraph stations on the Arizona Telegraph line are to be supplied with standard instruments for taking certain meteorological observations. Those include thermometers, anoscopes, pluviometers, barometers, etc. So soon as distributed, observations will be made regularly as such hours of local time as will make them synchronous with the telegraph taken at the full stations under charge of the Chief Signal Officer or 7:30am, 4:35pm, and 11pm, Washington mean time.<sup>13</sup>

This announcement included a telegraph station at Campo.

At a regular meeting on April 9, 1875 J.B. Wells read aloud from an essay on weather forecasts prepared by the St. Louis Academy of Science. The article described the science of weather observation. Wells suggested that a committee on meteorology be formed within the Society. Volunteers would assist the Signal Service with the gathering of climate data throughout the region, on a regular basis. Having several individuals assist in the task was important, because more observations taken on a regular basis meant a larger and more valuable the set data to use in forecasting the weather. The membership approved the proposal and a committee was formed with Wells as the head.<sup>14</sup>

At the next meeting, Wells presented an explanation and demonstration of the use of the barometer, thermometer, and other weather instruments. He explained that the keeping of constantly reliable data was essential to the science of meteorology. Wells wanted to generate additional interest by Society members by showing the inherent value of repetitious and possibly difficult work.<sup>15</sup>

George Barnes undertook a serious effort to get weather observations established with Society volunteers. He wrote a letter to the Chief Signal officer stating his intentions to set up observation sta-

tions around the community, and asking if instruments, forms and training could be supplied. He received a reply in late June indicating a positive response to the proposed project. Unfortunately, the Signal Service lacked funds to supply instruments. However, they were willing to provide standard forms for record-keeping and instructions on the correct use of instruments such as the thermometer, barometer, and pluviometer. If the Society wanted to establish weather observation stations around the county, they would have to purchase instruments with their own money.

Although the Signal Service could not supply the Society with observation instruments, the technical support they offered was valuable. In order for weather observation records to be of use for study, it was important that accurate readings be recorded in a standard format. The Signal Service had a well-established format for recording observations, and had many years of previous data upon which to build. Barnes understood the importance of maintaining statistical accuracy in observations, and decided that the Society must work with the Signal Service even if the Society had to pay for its own equipment. His foresight proved to be valuable later when the Metropolitan Water District prepared a report of historical rainfall patterns in Southern California over fifty years later.<sup>16</sup>

On July 18, 1875 a petition was presented to the Board of Supervisors for \$100, for purchase of special instruments for meteorological observations wherever practical in the county. The petition was granted with \$125 payable at the time of procurement.

On July 21, Barnes wrote another letter to the Signal Officer, stating again his intention to supply observers in suitable locations about the county, and asking exactly what instruments should be purchased in addition to thermometers. By early August, Barnes received a reply and sent off to Henry Jackson of the Signal Service a notice that he had ordered 10 psychrometers for seven dollars each. He also requested report blanks and instructions for eight observers. The equipment would have to be tested and approved by the Signal Service before it could be used for official records. The new equipment was shipped directly to the Signal Service in Washington D.C. on September 3, 1875. By September 24th, the instruments had finished being tested and the crates were shipped to San Diego.<sup>17</sup>

As of July 23, 1875 there was an official communication from Signal Corps verifying the establishment of weather stations. Six months later, volunteers from the San Diego Society of Natural History were established in conjunction with the Signal Service at several locations throughout San Diego county. The meteorological observers and stations were as follows: At Viejas, William Emery, B.R. Boggs, and J.T. Rick; at Julian, G.M. Daniels; at Cajon, Oliver Sanford; at Oakwood, Charles Fox; at Twin Oaks, G.F. Merriam and Fred Fox; at Poway, George Parnell; at Campo, Silas Gaskill; at the lighthouse, Ralph Israel; and at Ehrenburg, G.W. Brann.<sup>18</sup>

The Society was not only interested in observing weather phenomenon, but also in finding ways to influence the weather for the advantage of everyone living in the county. Several members of the Society were convinced that the number of trees in a given area had a direct correlation with the amount of rainfall in the area. They reasoned that San Diego would benefit from increased rain if trees were planted in the many barren expanses around the county.

George Barnes wrote letters to several colleagues around the United States, but he did not receive any positive confirmation of the hypothesis. Most responses he received stated that more study would have to be conducted to prove such a theory. Pushing onward anyway, the Society submitted a letter to the Daily Union discussing the advantages gained by the planting of trees in San Diego.<sup>19</sup> The authors reasoned that by planting trees on the "barren mesas" of the county, cloud formation would be encouraged, this bringing more rain to the area. Also there would be economic benefits of locally available lumber.

The report was adopted as an official opinion of the Society in November 1875. Barnes, however, dissented from the decision in a postscript to the minutes stating that he was not convinced that growing timber would really change the environment or rainfall. The Society adopted the position with the goal of encouraging the City Council to provide funds for tree planting around the county.<sup>20</sup> There is no evidence that large-scale tree-planting occurred as a result of this publicity about this idea, but the suggestion indicates the general feeling that humans could manipulate climate if only they could only understand the mechanism. This effort also demonstrated the

Society's self-created importance and influence.

In February 1876 there was a major storm and the San Diego Union was peppered with stories of problems relating to the storms. One editorial remarked about the uncontrolled flow of the San Diego River and the lack of governmental help with the problem. Another article reported mail lost near San Onofre Creek as a result of the storm. The article relates the story of a stage coach full of passengers and mail that was swept downstream. The stream was deeper and moving faster than expected. The driver and passengers jumped to safety moments before being carried into the ocean. The mail, the stage coach, and the horses were lost. This is an example of problems caused by unpredictably violent weather, and motivated the people of San Diego to attempt to find some method of predicting the weather.<sup>21</sup>

By the end of 1878, the volunteer observers from the Society were given a permanent appointment as a committee by the Chief Signal Officer. The official minutes state:

The Meteorological Committee reported that during the year it had been constituted a permanent committee by appointment of the Chief Signal Officer, and it had been in performance of duties under his instructions.<sup>22</sup>

The next phase of weather observation concerned the study of ozone in the county. In September 1879 the San Diego Union reported:

Dr. Barnes from the meteorological committee reported operations of the committee relating to the Signal Service and that arrangements had been completed and material supplied for observations of ozone by competent observers at two places in the county.<sup>23</sup>

Another article related the history of ozone. It stated that ozone, was a chemical principal named in 1848 by Schunbein, and was named for its "peculiar smell." The article states:

It being a colorless gas, with a powerful and peculiar odor, ozone is generally supposed to be oxygen in an allotropic state, that is to say, it is the same substance as oxygen, but in a different form, and endowed with different properties. The properties by which ozone is distinguished from oxygen are the following. It smells strongly and has the taste and flavor of lobsters; readily discharges the color from litmus paper, oxidizes silver, burns ammonia spontaneously

and converts it to nitric acid; burns phosphoretted hydrogen immediately with emission of light; decomposes iodide of potassium setting iodine free; and is a powerful chlorodizing agent.

The article was written by local physician M.L. Hearne who went on to describe in detail where ozone occurs, and how it can be produced and tested. Hearne attributes the source of much of his information to the observations made by the Society.<sup>24</sup>

The study of ozone was started because of scientific interest in studying atmospheric gasses, but also because ozone was believed to be beneficial to human health. As part of the effort to promote San Diego as an ideal place for invalids to recover, it would be very helpful to be able to quantify the normal amount of ozone and sunshine in San Diego. For example a later article titled "Ozone and Pneumonia" states:

It is the popular idea that ozone is a most wonderful health-giving agent, and the summer resort which can promise the most ozone need only mention the fact to attract crowds of guests. And yet it is save [sic] to say that the average summer resort owner has only a very hazy notion as to the nature and properties of ozone.<sup>25</sup>

This article reflects popular notions that had been in place for many years since the name was given to the atmospheric phenomenon. In fact, this later research in ozone linked the gas with pneumonia cases in New York.

Society volunteers began to pay special attention to observations of ozone. At the October meeting in 1879, the meteorological committee reported tests of ozone for the month of September by the Signal observer at this station and Campo which had been reported to them and stated that these observations had been quite successful and satisfactory.<sup>26</sup>

There was no doubt that the weather observations were valuable to the study of the San Diego region. An editorial in the San Diego Union promoted the idea that the Signal Corps should become a permanent entity for weather observations because the data is so valuable for the study of climatic conditions. The editorial stated:



The meteorological station in this city publishes to the world in the daily, monthly, and yearly reports of its observations valuable and reliable information of a climate unsurpassed for equability. The utility of the service by the tri-daily telegraphic reports in transmitting intelligence of violent storms from the northern Pacific coast and of the inception of many storms which cross the Rocky Mountains into the northwest is very great.<sup>27</sup>

The author of the article understood the importance of weather observation for local concerns even if he did not know how useful these records would be many years later as people continued their attempts to understand and predict the weather. Although at this time weather data was not often brought together for analysis, historical records were being created nonetheless. Worn notebooks and tattered log sheets were filed away in various places to be rediscovered at some later date.

In addition to organized field work for meteorology, the Society planned excursions, beginning a long tradition of organized collecting and observation trips in this region. The first of these excursions was to Ballast Point in March, 1875. The trip took all day, with the group leaving by boat from the pier and returning in the late afternoon.<sup>28</sup>

Almost every meeting of the Society brought new donations to the growing collection. Many of the items had been collected locally, but some were sent from other societies or institutions. For example, at a single meeting, the Society received bark, cones, and moss from the "big trees of Calaveras," a scorpion and tortoise egg from the Colorado desert, two kangaroo rats, a rare specimen of snake, sand from Lake Tahoe, marine shells from False Bay [Mission Bay], crystallized quartz from the tunnel at the summit of the Sierra Nevada, a rock covered with lichens from El Cajon, an old horse pistol found in the mountains, a fine specimen of lepidoptera from Cholla Valley, and a young rattlesnake.<sup>29</sup>

This array was typical of the items donated. All the items donated in a particular evening were placed on display in the meeting room, and a short presentation was made by the person presenting the gift. Published accounts of the meeting that appeared in the San Diego Union listed the donation and the name of the giver. In addition, any published work by a member was noted, and on-going work

was discussed. The Society accepted every donation. Over time, this lack of discretion proved to have created a shortage of storage space. At the beginning, however, the membership was glad to have anything the members wanted to give.

In addition to natural specimens, the Society received the beginnings of its library through various donations. Some early books included: Medical and Surgical History of the War of the Rebellion in three “finely” illustrated volumes, two “elegant” volumes of the Darien and Tehuantepec Ship Canal Surveys by the Secretary of the Navy, and a copy of the United States Census of 1870. A specimen of peat from Ireland came with a letter from a naturalist there describing how the peat was taken and its importance to the people of Ireland. This scientist was then considered to be a corresponding member of the Society.<sup>30</sup> The stomach ball of an ox was received with no specific comments. Bird eggs, fossil and fresh marine shells, rocks and minerals, plants and seeds (such as Mexican jumping beans), and animal and bird specimens were accepted.

Items donated to the Society were listed as part of regular meeting reports in the San Diego Union. The Society of Natural History continued to receive good coverage in the San Diego Union. Prospective members could follow the meetings and consider joining, knowing exactly what was taking place.

At this time there was one other natural history organization receiving regular column space in the San Diego Union. The San Diego Lyceum of Natural Sciences had been formed many years earlier, primarily by doctors. Topics discussed were usually of a medical nature and they met less frequently than the Society of Natural History. The Lyceum, however, was losing members at this time. Popular interest was becoming focused on the new, younger Society of Natural History. With its organized membership, activities, and favorable press, the Society of Natural History was positioned best to be the primary natural history organization in the area. By the end of 1876, Cleveland took steps to combine the two societies.<sup>31</sup>

Daniel Cleveland was an important voice in the Society. The minutes are full of his resolutions, contributions, ideas, and correspondence. Cleveland resolved that each member be presented with a

printed proceedings and be allowed to purchase additional copies at ten cents per copy.<sup>32</sup>

On April 9, 1975 Daniel Cleveland contributed "A Catalogue of a Portion of the Plants of San Diego County" which he had just finished. George Barnes wanted the Society to print as many original works as possible and contributed his own pamphlet describing the Society.<sup>33</sup>

Each year, in the middle of November, the annual meeting was held to celebrate the founding of the Society and to review the events and accomplishments of the previous year. George Barnes took seriously his task of preparing a report and motivational speech to the assembled members. Barnes was always critical of the Society's despite his constant enthusiasm about new projects. Typically in his annual address, he lamented that accomplishments of the past year were minimal and all could hope for better achievements in the coming year. Barnes tended to be overly conservative in his evaluation of the year just past and decidedly optimistic about prospects for the coming year. At the sixth annual meeting Barnes gave his most glowing report of Society progress to date he stated:

"...the Society is more prosperous now than at any former period of its history." Although he had his typical list of recommendations he seemed genuinely pleased with the Society.<sup>34</sup>

Barnes was easily re-elected as President, each year and fulfilled his role with enthusiasm.

The years 1875-1879 formed the character and spirit of the San Diego Society of Natural History which would be carried on for many years. The men and women participating in the early years of the San Diego Society of Natural History had no pretensions of importance about their scientific work, nor did they perceive themselves as part of any genre or social movement. These people pursued their interests in nature study for personal satisfaction and motivated by their curiosity, unaware of what benefit their actions might encourage in the future.

The time period discussed in the chapter that follows describes the years 1880-1888, an interval when the Society flourished as an established institution.

## Notes



1. The concept of a war between science and religion became popular in the late nineteenth century, and was defined as such by John W. Draper in his book *History of the Conflict between Religion and Science*, published in 1874. Historian J.B. Russell assigned importance to Draper's book stating:

"The History of the Conflict is of immense importance, because it was the first instance that an influential figure had explicitly declared that science and religion were at war, and it succeeded as few books ever do. It fixed in the educated mind the idea that 'science' stood for freedom and progress against superstition and repression of 'religion.' Its viewpoint became conventional wisdom."

It is not clear how much the idea of a war between science and religion influenced the men who started the Society, but there is no evidence that they discussed such philosophical notions. Jeffrey B. Russell, *Inventing the Flat Earth* (New York: Praeger, 1991), p.38.

2. SDSNH, Minutes, Dec. 1, 1874.
3. San Diego Union, Jan. 6, 1875.
4. The names of the women were recorded in the minutes as follows: Miss Henrietta Nesmith, Miss Mary Marston, Miss Lillie Marston, Miss Anna Barry, Miss Julia Hubbell, Miss Fanny Spencer, Miss Lizzie Bashford, Miss Mattie Sanford, Mrs. R.S. Clark, and Mrs. Spence. SDSNH, Minutes, Mar. 12, 1875.
5. SDSNH, Minutes, Jun. 13, 1875.
6. SDSNH, Minutes, Jun. 6, 1875.
7. SDSNH, Minutes, Apr. 30, 1875.
8. SDSNH, Minutes, Apr. 23, 1875.
9. Atmospheric haze that was not fog was often referred to by them as ozone and was a subject of much discussion and study by these early observers.
10. Carpenter, Ford A., The Climate and Weather of San Diego, California.

(San Diego: Chamber of Commerce, 1913) p.1.

11. The work of the Signal Service weather bureau throughout the United States continued until 1891. At this time all non-military meteorology was transferred to the Department of Agriculture. Marshall, Max L. ed. The Story of the U.S. Army Signal Corps. (New York: F. Watts, 1965) p.282
12. Carpenter, The Climate and Weather, p.2.
13. San Diego Union, Jun. 25, 1875
14. Ibid. Apr. 11, 1875.
15. SDSNH, Minutes, Apr. 27, 1875.
16. For records prior to 1890, the Metropolitan Water District relies on data collected by organizations other than the United States Army, including railroad companies, water and power companies, and organizations of private citizens. Preparation of rainfall records involved weighting different types of data according to their reliability. Records taken at weather bureau locations were weighted the highest, followed by records taken at a single location (except railroad and lighthouse records), private records at a single location, and private records made at shifting locations. Records reported through the Weather Bureau are weighted higher than records reported separately. H.B. Lynch, "Rainfall and Stream Run-Off in Southern California Since 1769," Report of the Metropolitan Water District of Southern California, Los Angeles, Calif., August, 1931 (Los Angeles Calif.: Metropolitan Water District, 1931), p. 6.
17. Letter, Chief Signal Officer to George Barnes, Sept. 3, 1875. San Diego Museum of Natural History Archives, Weather Station Letter File.
18. SDSNH, Minutes, Dec. 9, 1878.
19. San Diego Union, Nov. 21, 1875.
20. SDSNH, Minutes, Nov. 5, 1875.
21. SDSNH, Minutes, Feb. 2, 1876.
22. SDSNH, Minutes, Dec. 6, 1878.
23. San Diego Union, Sept. 4, 1879.
24. Ibid. n.d. (believed to be Sept. 1879)

25. San Diego Union, Sept. 13, 1885.
26. Ibid. Oct. 11, 1879.
27. Ibid. July 23, 1875.
28. SDSNH, Minutes, Mar. 12, 1875.
29. SDSNH, Minutes, June 6, 1875.
30. SDSNH, Minutes, Apr. 11, 1875.
31. SDSNH, Minutes, Dec. 18, 1876.
32. SDSNH, Minutes. Mar. 2, 1878.
33. SDSNH, Minutes, Apr. 9, 1875.
34. San Diego Union, Dec. 6, 1878.



Charles Russell Orcutt, June 10, 1905 with his *Cereus orcutti*.  
From the archives of the San Diego Natural History Museum.

## CHAPTER 4

### The Society Prospers: 1880-1888



The years 1880-1888 were a time of prosperity and progress for the San Diego Society of Natural History, as well as a boom time for the San Diego economy. A general feeling of prosperity was felt throughout many aspects of community life, allowing money and enthusiasm to spill over into organizations such as the San Diego Society of Natural History.

The decade beginning in 1880 was marked by stability and continuity for the Society, which had then been in existence for six years. Dedicated members attended meetings faithfully, and administered a number of scientific projects in the community. The Society had corresponding members from all over the United States and Europe. Proceedings of the Society were being reprinted in newspapers in New York. In San Diego, the Society was an active and vocal part of the community, involving some of the most influential promoters of San Diego.

George Barnes retained his position as president of the Society during these years. He constantly reminded the members of the origins and directions of the society, and encouraged them to pursue their work with vigorous effort. Meetings occurred regularly each month. There were discussions on all sorts of topics and donations of books and natural history items continued to accumulate. The Society attracted visiting scientists who participated in the meetings as guest speakers or as observers.

While George Barnes continued to be a strong and enthusiastic leader during this time, there was another person who influenced the goals and ideals of the Society of Natural History. Charles C. Parry (1823-1890), eminent botanist and authority on the plants of the United States and Mexico border region was a favorite speaker and respected friend of the Society.<sup>1</sup> As a professional scientist, he brought



an expansive perspective to the group of mostly amateur naturalists. He encouraged members to be forward thinking about their organization and to take steps to insure its strength of purpose and strong growth for the future.

Charles Parry influenced the society most by stimulating the members efforts and interests in conservation of local habitats. He saw the society as a vehicle for initiating the conservation of rare plants and ecosystems that were being destroyed because of misuse by the residents of San Diego county. Parry's experience and personal friendships with members of the Society positioned him as a mentor, allowing him to help the Society build its strength as a group and suggest projects and concerns appropriate for the attention of the Society.

In April 1882, Dr. Parry addressed a regular meeting of the Society. The lecture included some interesting reminiscences of historic and scientific interest to people of San Diego. He spoke of his previous visit to San Diego in 1850 as part of the Mexican Boundary Survey Party. He compared the hardships of early botanical surveys with the much improved conditions in the San Diego of that day. He spoke of the unique and special aspects of this border region and acknowledged Daniel Cleveland and the Society for their efforts. Parry stated:

Thanks then, to Mr. Cleveland and the San Diego Natural History Society, that the spot made classic by the early explorations of Nuttal, still offers attractions to modern botanists, under far less hardships and privations.<sup>2</sup>

At the conclusion of his remarks he offered words of advice to the Society. First, he encouraged the Society in their work, pointing out that most of the interior country and extensive shoreline both in San Diego and in Baja California, had as yet been largely unstudied by naturalists. He emphasized that the Society was now in a unique position to accomplish significant exploration to discover previously unknown species of plants, marine animals, and geological formations. He enticed the members with the thrill of working in an area so unknown to science, and the possibility that they could make important contributions to the study of the west.

Parry offered three specific suggestions for strengthening the Society and making it better prepared to take advantage of the riches of the region. His first suggestion was to involve the women of the community. Parry assumed that an organization including women would become stronger through the women's participation encouraging regular meetings and planned activities. Next Parry recommended the Society obtain a building which would be owned by the Society, free of debt. This would assure a stable home for the collection and a fixed location for meetings. His third suggestion was that the Society begin as soon as possible to publish proceedings and to collect scientific journals for the reference of the members.<sup>3</sup> Parry's suggestions were greeted with approval by the members. Although his ideas were not new directions for the Society, the members re-focused their efforts on these three specific goals.

At a meeting in March 1883, Dr. Parry first reported to the Society the danger to the Torrey Pine tree<sup>4</sup> and he challenged the Society to acquire land around the trees "to secure their growth from threatened extermination."<sup>5</sup> Although the Society was interested in the plight of the trees, no action was taken immediately. Parry would have to try again to convince the Society of the importance of conservation.

At the Annual meeting in November 1883 a letter from Dr. Parry was read to the members. His subject was the historical significance of the *Pinus torreyana* and the need for conservation. The letter requested action from the Society saying:

Why should not San Diego, within whose corporate limits this straggling remnant of a past age finds a last lingering resting place, secure from threatened extermination this remarkable and unique Pacific Coast production so singularly confined within its boundaries dedicating this spot of ground (utterly useless for any agricultural purpose) forever to the cause of scientific instruction and recreation? Where wiser generations than ours may sit beneath its ampler shade and listening to the same musical waves thank us for sparing this tree. And finally why is not the San Diego Society of Natural History the suitable body to recommend such action?<sup>6</sup>

Parry strongly urged the members to undertake the challenge of protecting the Torrey Pine tree. A committee of three appointed was appointed to look into means of conserving of the trees and the sur-

rounding land. A committee consisting of John G. Capron and Joseph Surr was appointed to confer with the proper authorities and take such steps as might best protect the trees from destruction.<sup>7</sup>

The Torrey Pines committee produced results quickly. In August, Joseph Surr reported that the committee had presented the matter to the Board of Supervisors and the Board of City trustees, and that both had passed ordinances offering \$100 reward for the arrest and conviction of any who should cut or otherwise destroy or injure said trees.<sup>8</sup> In September, John Capron asked trustees of the City for a law to be passed giving perpetual protection to the Torrey Pine. The new law was passed immediately.<sup>9</sup>

Also in August 1885 the Society drafted a petition to the United States Congress asking to have the lands surrounding the trees donated to the Society who would act as protectors.<sup>10</sup> The project to gain perpetual protection for the Torrey Pine continued to be an important concern of the Society through the mid-1920s when the Torrey Pines Reserve was established.<sup>11</sup>

Much of the action taken by the society relied upon the personal work of many individuals. Individual members brought to the Society their personal enthusiasm and interest in scientific projects. Attending meetings, representing the Society before the City Directors, and taking responsibility for specific projects, many dedicated individuals contributed to the success and character of the society as it is remembered today. A brief look at the lives and involvement of two colorful individuals, Rosa Smith and Charles Orcutt, provides insight into what the Society was like as an institution, and what types of people were attracted to join. Both Rosa Smith and Charles Orcutt became involved with the Society as teenagers, and were vocal contributors who were mentioned frequently in newspaper accounts of meetings.

Rosa Smith became the first librarian of the Society, and served as its recording secretary for several years. Most interesting about Rosa is her personal interest in fish and how her involvement in the Society encouraged her career as an ichthyologist.

Rosa Smith Eigenmann was born October 6, 1858 in Monmouth, Illinois. She was the last of the nine children of Charles K. and

Lucretia Gray Smith. Around age 16, Rosa Smith became ill with tuberculosis. The family doctor advised that Rosa could not survive another Illinois winter, so she came West with a family bound for Watsonville, California in 1875.<sup>12</sup> After a few months, Rosa's family moved from Illinois to San Diego. Rosa eagerly joined them, and arrived from San Francisco by steamer in 1876. Charles K. Smith, Rosa's father, became employed as the first clerk of the Russ High School of San Diego. Rosa lived with her family and attended Point Loma seminary.<sup>13</sup> Rosa was very interested in fish and found that Point Loma was a wonderful place to observe them first hand. Her father, a member of the Society, no doubt brought his daughter to meetings because of her interest in science. Although Rosa was only sixteen, she was already making informal studies of fish and was becoming an authority on species in this region. In 1879 Rosa Smith became the first librarian to the Society of Natural History, and served as its recording secretary.

Rosa Smith was very proud of her membership in the Society. When she became secretary, she started a scrapbook for all the clippings of meeting minutes that appeared in the Daily Union. Book I of her scrapbooks starts with the inscription:

Proceedings of the San Diego Society of Natural History, beginning with the sixth annual meeting; at which I was elected an Active Member 1879.

Rosa pasted the clippings carefully, and diligently marked typographical mistakes and factual corrections in the margins.<sup>14</sup> Rosa herself was mentioned in meeting minutes quite often. At almost every meeting she was mentioned for reading correspondence, exhibiting specimens, or presenting her own papers.

With Rosa Smith as Secretary came a period of consistent reporting of activities of the Society through the Daily Union. After Friday evening Natural History Society meetings, Rosa took the minutes directly to the offices of the Daily Union, and prepared them for publication in the Saturday issue. Never before had meeting minutes been available to the public in such a timely manner. Rosa Smith put forward this great effort only to "help out" the causes of the Society of Natural History, not for salary or "space-rate" pay.<sup>15</sup> She may also have wanted to contribute to the success of the San Diego Union, which at that time was published by her brother Russell Smith. She

also worked as a bookkeeper for the San Diego Union for a time.

In 1880 Rosa began to publish her own scientific papers and read her first paper before the Society.<sup>16</sup> The subject was the Blind Goby and the members were full of praise for her work. A guest attending the meeting, David Starr Jordan of the University of Indiana, was highly impressed by her thorough field observations and obvious talent for scientific research.<sup>17</sup> He convinced her to help with a fishery survey he was conducting in San Diego. He even lured her away to Europe for a summer of traveling with several of his students.

Rosa made the trip to Europe, often sending letters to be read at Society meetings, and some of which were printed in the San Diego Union.<sup>18</sup> During this time she was considered Corresponding Secretary as the Society was eager to count her among the active members. In the fall of 1880, Rosa enrolled at Indiana University at the urging of Dr. Jordan. She studied there for two years, concentrating on subjects such as Zoology and Botany. In 1882 she returned to San Diego, reportedly due to illness.<sup>19</sup>

When Rosa returned to San Diego she renewed her acquaintances at the Society and eagerly presented the results of her latest work on a fish called the New Blenney.<sup>20</sup> In April 1882 Rosa Smith resumed her duties as secretary of the Society.<sup>21</sup> When she was not working or involved with Society activities, Rosa spent much of her time at Point Loma, poking around the tide pools and observing the fish life there. Among the fishes that especially intrigued Rosa was the Blind Goby.<sup>22</sup>

In addition to her observation work at Point Loma, Rosa Smith also took a number of excursions with other society members to different places in Baja California. These expeditions were general scientific adventures, providing an opportunity for each member of the party to collect specimens in his or her field of interest. Because travel was rough and sometimes dangerous there were distinct advantages to traveling in a group and having a guide who knew something of the roads.

In the January 1883, Rosa accompanied her father, the Orcutt family, Charles Parry and others to Todos Santos Bay for three weeks. This trip was fondly remembered by Society members for years after-

ward because it was so successful and so well embodied the ideals of the Society. The excursion had several purposes. They intended to study the marine life at the edge of the bay and the Orcutts wanted to bring specimens of the *Rosa minutifolia* back to San Diego for cultivation.<sup>23</sup> In studying the fishes of the bay, Rosa interviewed the only fisherman on the bay and made her own surveys of the beach at low tide.

Later that spring Rosa Smith accompanied another group to Table Mountain, east of San Diego.<sup>24</sup> When Rosa returned to San Diego, she continued her fish studies. In 1884, the Smithsonian Institution requested that she make a collection of surf fishes.<sup>25</sup>

Rosa left the Society in 1887 after she married. She moved to Harvard with her husband Carl H. Eigenmann to work with the famous Agassiz collection at Harvard University.<sup>26</sup> This was the end of Rosa's active involvement with the San Diego Society of Natural History but her scientific interests continued for the rest of her life.

Charles Russell Orcutt was a naturalist who also became involved with the Society as a teenager. Charles Orcutt was born in Hartland, Vermont in 1864. His father, Heman Orcutt, was a grower of specialty plants and an horticultural enthusiast. He cultivated plants for sale and studied professional plant journals. The family moved to San Diego in 1879.<sup>27</sup> Heman Orcutt bought land near the ruins of the Mission San Diego de Alcalá where he started a small horticultural nursery.<sup>28</sup> With his father, Charles made many excursions around the San Diego region to collect plants. They visited Cuyamaca, Soda Springs, Campo, and Borrego. They found dozens of plants not familiar to them and thoroughly enjoyed exploring their new home.<sup>29</sup> Heman Orcutt joined the Society of Natural History in 1879.

In his own reminiscences, Charles Orcutt recalled that he had been a collector for as long as he could remember. He wrote:

(I) amused myself at first with collections of buttons, paper men, and later beans. In 1875 I first began a garden and in the fall my collections of beans numbered two hundred and two varieties which were exhibited in two shallow boxes, the varieties separated by strips of wood.

He described how he and his brother started a shell collection, which

for a long time was displayed on a tea plate.<sup>30</sup>

Charles Orcutt made his first trip to Baja California at age of eighteen. He and his father accompanied Charles Parry and two other botanists on an expedition to Ensenada in 1882. Charles Orcutt was hired as driver of the wagon that carried supplies for the camp, and specimens collected along the way. Charles Parry, the leader of the expedition, noted that Charles was an inquisitive boy, and was interested in everything.<sup>31</sup> Orcutt learned from Parry and the other scientists how to collect, preserve, and catalogue specimens for study. Orcutt was in awe of Parry and absorbed the praise with obvious pride.

A different view of Orcutt was written by Marcus E. Jones(1852-1934) one of the botanists on this same trip.<sup>32</sup> Jones disliked Orcutt from the time they met and was annoyed by the boy's lack of attention to his driving in favor of exploring the surroundings. Jones stated his impression of Charles Orcutt as he is describing the start of this trip. He recalled the second day of the expedition this way:

Charlie Orcutt magnified his position until he became intolerable, and he was always toadying to Parry and neglecting his duties. So I took him aside and reminded him that I was paying him half of the expenses and expected service from him, and would see that he gave it if I had to beat him up. He saw that I meant it and after that sullenly obeyed orders. He was a gawky stripling with fuzz all over his face.<sup>33</sup>

Like others to come, Jones did not approve of Orcutt's self-centered approach to science. Jones completed his assessment of Orcutt with some final comments writing:

That trip with Parry and me convinced Charlie Orcutt that he was a great botanist, and he began to swell like a toad. Later he took several trips into Mexico and collected several new species. His chief difficulty was that there was not enough room in California for himself and other botanists. He was crooked financially, and impossible to get along with, and yet he had considerable talent, but the petting he received from Cleveland and others turned his head and he never amounted to anything.<sup>34</sup>

These were strong words of criticism and reflect Jones' own personal bitterness toward other botanists in general. However, his observa-

tions contain some honest elements. It was true that members of the Society of Natural History encouraged Orcutt by praising his work, and it was true that Orcutt was not well-liked by many individuals. Equally true is that Charles Orcutt had talent in the field of collecting and observations of nature. Jones' assertion that Orcutt never amounted to much is subjective criticism. Orcutt's enthusiasm and hard work furthered the goals of the Society of Natural History, and it is largely through his expectations and aspirations that the Society was moved to eventually establish a museum. Orcutt's career with the San Diego Society of Natural History had an important influence on the development of the Society, even though he never held a position as an officer or director.

Charles Orcutt became a member of the Society without fanfare. From the time of that first expedition to Ensenada he maintained correspondence with Parry and involved himself actively with Society meetings. He and his brother John attended meetings with their father. They contributed specimens to the collections of the Society and each served in the positions of librarian and curator at different times.

Despite Orcutt's difficult personal style, he made valuable contributions to the Society. For most of his adult life Orcutt maintained some sort of association with the Society. He contributed to the collections of the Society from his many collecting trips and exchanges with other naturalists. Later in his life he corresponded with the Society as he traveled through New Mexico, Texas, and ultimately Haiti. Toward the end of his life, he donated his entire collection to the Society. He never abandoned his dream that "through the work of many hands," his collections would become the core of material for museum exhibits and research.<sup>35</sup>

Besides his participation and collection, Charles Orcutt contributed to the Society through his writing and publishing. In 1884 at the age of twenty, Charles Orcutt announced to the Society his intent to write and publish *West American Scientist*.<sup>36</sup> It was the first of several scientific journals he published during his lifetime.<sup>37</sup> The first issue of *West American Scientist* was presented to the Society and accepted as the official organ of the Society in January 1885.<sup>38</sup> In his publications, Orcutt wrote detailed accounts of his collecting expedi-



tions. He always took notes during his travels. Later he would print them in the form of stories about particular expeditions or as "Stray Leaves from a Notebook."<sup>39</sup>

As expeditions occurred more frequently, progress was also being made in the meetings. Over the years, proceedings became more formalized. By 1884 the Society saw the need to create more committees to represent the many areas of interest. The society authorized George Barnes to appoint some member of the Society to represent each branch of natural history, to whom all questions pertaining to that branch should be deferred.<sup>40</sup>

In November 1885 a committee was formed with the goal of creating an official seal for the Society. After much consideration the committee recommended a design bearing the profile of G.W. Barnes, with the name of the Society and the date of its organization encircling the profile.<sup>41</sup> The following August, the seal was produced by the Stephens Lithographing and Engraving Company.<sup>42</sup>

During these busy years the Society also began sponsoring public lectures. One of the first lecture series presented by the Society featured speaker Professor Kleeburger at Horton's Hall. Kleeburger presented several topics including the past history of the earth, the origins of the sun, Darwinian theory, and comets. He showed pictures using a stereopticon. The Society was pleased with the large numbers of people attending the lectures.

Several years later the Society presented a lecture series that featured a woman speaker. The lectures were to benefit the building fund created in November 1884. Mrs. Joseph Surr, delivered the first of a series of lectures.<sup>43</sup> On the evening of the first lecture, Dr. Barnes introduced Mrs. Surr and gave an overview of the history and work of the Society. The lecture was titled "The Beautiful" and related to nature, and the taste, dress, habits, life, and character of the human family." She gave many reminiscences of her late English home and travels, illustrative of the beauty in nature and in decorations. Local habits and customs were compared and commented on. The use of carpets on floors was decried on the score of cleanliness. Although this was a departure from the usual natural history subjects the event shows the diversity of interests of the Society. The audience was very interested in the presentation and the first fundraising event for the

building fund was deemed a success.

Donations of all kinds continued to accumulate over the years. A problematic donation was that of the El Jupiter cannon, a relic residing in Old Town, and of great importance to the settlers of Old Town. the residents of Old Town presented the cannon with flourish, and a formal document expressing their hope that the pieces of the cannon would be preserved as relics of history. their decree stated:

The undersigned pioneer residents of San Diego, regret the fate of the old town cannon, and, that its pieces may be preserved as relics of history of the past, donate them, together with the carriages to restore, reserves, and display conspicuously.<sup>44</sup>

However, the cannon was in need of repair, and the Society really did not have any place to store or display the item. The Society would eventually have to focus the scope of their collection, but for the time being just the opposite approach was adopted. In February, 1885 the Society merged with the San Diego Historical Society. The Society was now the single institution in San Diego where people could find a home for treasures they wanted to see preserved for the future. At this point the Society envisioned itself as an important San Diego institution for the future, but beyond this broad consideration there were no specific guidelines or plans. The actions of the Society at this moment were driven by immediate needs. The most obvious need now was to obtain a place for their growing collections.

As early as 1881 the Society formally stated their intention to build a facility for their meetings and to house their collections. Their resolution to erect a suitable building for the use of the Society depended on them first finding a suitable lot.<sup>45</sup> In response to encouragement from Charles Parry and the growing storage problems for the collection, a building fund was created in 1884.<sup>46</sup>

Good fortune befell the Society in 1887 when it received a gift of land intended for a permanent building. Ephraim W. Morse, was an early member of the Society and served as treasurer for many years. In 1885 Morse resigned as treasurer to permit himself time for other activities. In early 1887 Mary C. and Ephraim W. Morse gave the Society one lot on 6th street between B and C streets for purpose of "securing a suitable building and advancing the cause and knowledge

of science." In a hand-written letter to the Society, Mary and Ephraim Morse stated:

We have carefully considered the matter, and taking a deep interest in the welfare of your Society, we make you the following proposition...to donate Lot II of block 18, Horton's Addition upon the following conditions...

The Morse's stipulated five conditions for the gift of the lot.<sup>47</sup> the Society agreed to the terms of the gift, and on March 5, 1887 the lot was officially donated.<sup>48</sup>

In August 1887 there was a proposal to build a three story building on the Sixth Street lot, but a lack of money was a serious problem.<sup>49</sup> By 1889 the building fund amounted to only \$77 despite fundraising efforts and pleas for donations from members. It became clear that the building would have to wait.<sup>50</sup>

The plan to construct a building was not the only far-reaching ambition of the Society at the end of the decade. Charles Orcutt had grand ideas about the creation of a museum that were essentially an extension of his lifelong ambitions. In 1888 he published a comprehensive description of his idea including the object, scope, collections, library, publications, exchanges, organization and government, and the museum staff. He envisioned an institution called the West American Museum that would encompass all elements of Western America. In the Scope description, Orcutt stated:

It is not proposed to limit the scope of the museum in any way. Its immediate field consists of the west coast of the American continent, extending from Alaska to Cape Horn. Arrangements are being made for the forming of large and exhaustive collections representing the flora and fauna, natural resources, prehistoric remains, etc., etc., of the two Americas...The very comprehensive plan of the museum, if carried to completion, would rival any institution in America not even excepting the U.S. National Museum, in charge of the Smithsonian Institution. But such result requires time for maturity. "All Things are Possible" is an Arabic saying, and the little collection displayed on a tea plate a dozen years ago may yet rival the accumulation of ages under the genial skies of California.<sup>51</sup>

The description is clearly devised by Orcutt and an integral part was

his own collections, library, and publications.<sup>52</sup> Orcutt alludes to the gift of land by the Morses as evidence that his plan was headed for success. In his enthusiasm to achieve his goal however, Orcutt unwittingly hampered the project with his public approach to gaining support for the idea.

Orcutt's desire to direct and control the organization of the museum was greeted by silence in the meeting minutes. More than likely the members thought Orcutt's ideas had merit, even though they might be daunted by the huge scope of the endeavor. No person challenged Orcutt's plans as a worthy goal for the Society, but no action was taken to support the project either. Another factor in this turn of events was that interest in the Society was beginning to wane at this point. The voice of George Barnes was heard less frequently. Daniel Cleveland, although still active as a member and supporter of the Society, did not aspire to a leadership role.

Daniel Cleveland was intent on making contributions to the study of botany in the San Diego region. At the April 9th year meeting he presented his catalogue of plants of San Diego County. This was the final product of his collecting work and the work of identification of specimens sent to Dr. Gray at Harvard. This work was also a credit to the Society and was the first of a series of such guides on a variety of subjects.

At the Fifteenth Annual meeting in 1888, George Barnes announced his resignation due to ill health. He reflected on the accomplishments of the Society and thanked the members for their courtesy and consideration over the years. He proclaimed the most important goal of the Society in the near term was the erection of a building on the ground donated by the Morses. He recommended one of cheap construction, but sturdy and fireproof. The building should either be constructed as a temporary facility or constructed sturdily but simply to be more valuable for future renovation. The members overwhelmingly adopted a resolution recognizing Barnes for his achievements in the organization. Elections were held and Daniel Cleveland was voted to be the new president.<sup>53</sup>

## Notes



1. Charles Christopher Parry was an eminent botanist born in Admington, England 8/28/1823. He was appointed botanist to U.S and Mexican border survey of 1849. A botanical explorer of the western states and territories, he was the first botanist in the U.S department of Agriculture and he organized plant collections brought by scientists at the Smithsonian 1869-71. Ronald Calinger & Edward Collins, ed., *World Who's Who in Science* (Chicago: University Press, 1968), p.394.
2. Parry liked to encourage the young society by pointing to their accomplishments and praising their efforts. In this instance he thanks Daniel Cleveland especially because of Cleveland's work collecting plant specimens, sending them to Harvard, and thereby keeping the San Diego region in the minds of researchers in the East. Nuttall was the first to make detailed studies of the region but the work would have fallen into obscurity if not pursued by a new generation of scientists. Another important contribution by Cleveland was his work establishing San Diego as a favorable place to live and providing facilities from which to conduct collecting work. His efforts in organizing the Society are another aspect of Cleveland's furthering science in this region. *San Diego Union*, Apr. 12, 1882.
3. *San Diego Union*, Nov. 3, 1883.
4. The Torrey Pine was described as a new species *Pinus torreyana*, by Dr. Charles Parry as part of the U.S.-Mexican Boundary Survey. The tree was also referred to locally as the Soledad Pine. Carl L. Hubbs and Thomas W. Whitaker, ed., *Torrey Pines State Reserve* (La Jolla: The Torrey Pines Association, 1972), p.20.
5. *San Diego Union*, Mar. 4, 1883.
6. *Ibid.* Nov. 5, 1883.
7. SDSNH, Minutes, June 5, 1885.
8. *San Diego Union*, Aug. 7, 1885.
9. SDSNH, Minutes, Sept.17, 1885.
10. The petition asked that land be granted to the San Diego Society of Natural History for "scientific purposes to wit: sections twelve, thirteen, and fourteen, Township 17 South, Range 1 West, San Bernardino

Meridian, San Diego County, California." San Diego Union, Sept. 27, 1885.

11. The Torrey Pines Reserve was established in 1921 through the patronage of Ellen B. Scripps. The founding of the reserve came after many years of studies and requests for action to save the trees by members of the Society. Hubbs, Torrey Pines State Reserve, pp.8-9.
12. Letter, Thora Eigenmann to the California Academy of Science, n.d., Carl L. Hubbs Collection, Scripps Institution of Oceanography, Eigenmann Letter File.
13. Scripps Institution of Oceanography. Hubbs Collection, notes for an article in "Notable American Women," dated July 19, 1968.
14. These scrapbooks are contained in the collection at the Natural History Museum.
15. "Woman Writer's Experiences on Union in 1880 Recounted," San Diego Union, Dec. 6, 1938.
16. Her talents as a scientist were soon discovered by David Starr Jordan (1851-1931), America's greatest ichthyologist, who came from Indiana University to San Diego to take part in the first fisheries survey of the West Coast, for the newly founded U.S. Fish commission in 1880. Elizabeth Noble Shor, "Eigenmann, Rosa Smith," for American National Biography (currently in press).
17. San Diego Union, Aug. 8, 1880.
18. Letter, San Diego Union, Aug. 20, 1881.
19. Whether the illness was her own or of a family member is unclear. Elizabeth Noble Shor, notes for article "Eigenmann, Rosa Smith," for American National Biography (currently in press). Scripps Institution of Oceanography. Hubbs Collection
20. San Diego Union, Nov. 5, 1880.
21. San Diego Union, Apr. 12, 1882
22. This fish had been named by Franz Steindachner from a single specimen. Rosa observed many of them living in the burrows of the California ghost shrimp. In that isolated environment the fish had lost its vision and was quite unlike its relatives in the open ocean. Shore, notes for article "Eigenmann, Rosa Smith." Scripps Institution of Oceanography. Hubbs Collection.

23. Charles R. Orcutt, "Charles Christopher Parry," *West American Scientist*, Vol. VII, (June 1890), 1-5.
24. Charles. R. Orcutt, "Heman Chandler Orcutt" *The West American Scientist*, VIII (July, 1893), 32.
25. Personal Notice, *San Diego Union*, III (July, 1884), 1.
26. In 1886 Rosa Smith met ichthyologist Carl H. Eigenmann who had been sent from the University of Indiana on a collecting trip. She showed him the area at Point Loma and helped him with his work. They became friends, and were married at her parents home in San Diego in 1887. They collected specimens on their honeymoon, and applied to work together on the Agassiz collection at Harvard. They were accepted and began their work in the summer of 1887. For the next two years they conducted joint studies and co-authored several papers. Personal Notice, *Young Men's Journal*, I, (August, 1887), 5.
27. *West American Scientist*, VIII (July, 1893), 31.
28. *West American Scientist*, VIII (January, 1893), 90.
29. *West American Scientist*, VIII (July, 1893), 32.
30. Later, when Orcutt published his prospectus for a museum, he refers to that tea plate as the beginning of the natural history collections to be displayed in the San Diego museum. Charles R. Orcutt, "The West American Museum." *West American Scientist*, Vol. IV (April, 1888), 24.
31. At different times, staff members of the Museum of Natural History compiled biographical notes and information about C.R Orcutt's expeditions. Typed notes of Dr. Reid Moran, Curator of the Herbarium, San Diego Museum of Natural History, Balboa Park, c1964.
32. Marcus E. Jones was a botanist who collected a large personal herbarium over many years. His work as a mine inspector took him over the Great Basin region and throughout the Pacific portion of the United States and he took advantage of every opportunity to add to his collection. His herbarium became the basis of the collection at Pomona College in Claremont, California. He is best known for a scientific journal he published over the course of several years entitled "Contributions to Western Botany" in eighteen volumes. The biographical sketch cited here also notes that Jones was well known in scientific circles for his scathing personal attacks on other botanists which he published as part of his "Contributions...". W.L. Jepson, "Marcus Eugene Jones," *Madroño*, II, (Berkeley, 1934), 152-154.
33. Marcus E. Jones, *Contributions to Western Botany*, 17 (September,

- 1930), 4.
34. Ibid. p.5.
  35. As early as 1890, Orcutt recognized that his collection was becoming too large to house at his residence and other properties. He also indicated that other people were needed to help with the task of cataloguing and displaying the collection. He always seemed hopeful that someone might become interested in his cause and help him make something grand of the collection. *West American Scientist*, VII (August, 1890), 1-20.
  36. Orcutt did so and the first issue proclaimed that it was the official organ of the Society. *West American Scientist* continued sporadically until at least 1919. The volumes of *West American Scientist* are at The Museum of Natural History in Balboa Park are bound editions of Volumes 1-22, covering the dates of 1884-1919.
  37. Some other of his journals include *California Art and Nature* (1901-1902), *West American Mollusca* (1900-1902), *Orange Blossom* (April 1891-August 1891), *Golden Hints For California* (1891-92, six total). Helen DuShane, *The Baja California Travels of Charles Russell Orcutt* (Los Angeles: Dawson's Book Shop, 1971),p.70.
  38. SDSNH, Minutes, Jan. 18, 1885.
  39. *West American Scientist*, I, (July-August, 1885), 56-57.
  40. SDSNH, Minutes, Mar. 9, 1884.
  41. *San Diego Union*, Nov. 10, 1885.
  42. SDSNH, Minutes, Aug. 11, 1886.
  43. Mrs. Joseph Surr formerly worked on the Board of Public Schools in London, England. *San Diego Union*, Jan. 18, 1885.
  44. Letter from the residents of Old Town to the San Diego Society of Natural History Dec. 30, 1880., San Diego Historical Society, Vertical File.
  45. *San Diego Union*, June 2,1881.
  46. Ibid. Nov. 7,1884
  47. The stipulations were as follows: 1) The Society shall not sell or mortgage the lot without consent, 2) The lot must be used for legitimate purposes, 3) A suitable building is to be erected within 3 years, 4) Free lectures on scientific subjects must be given in the building, and 5) Liberal



use of the hall for public uses not inconsistent with Society interest. Letter from Mary C. and Ephraim W. Morse to the San Diego Society of Natural History, March 2, 1887. San Diego Museum of Natural History, Archives.

48. Letter from Mary C. and Ephraim W. Morse to the San Diego Society of Natural History, March 5, 1887. San Diego Museum of Natural History, Archives.
49. San Diego Union Sept. 3, 1887.
50. Carroll DeWilton Scott, *The San Diego Society of Natural History, 1874-1924* (San Diego: Society of Natural History, 1924), p. 13. Statement about pamphlet
51. Today it is unthinkable that the museum might have encompassed such a large area, both geographically and scientifically. Orcutt had unrealistic goals for the museum, but he did accomplish some movement forward on establishing a museum, even if physical progress was almost non-existent. Charles R. Orcutt, "The West American Museum." *West American Scientist*, IV, (April, 1888), p.24.
52. Charles R. Orcutt, "The West American Museum of Nature and Art," *West American Scientist*, III (February, 1891), 9.
53. San Diego Union, Nov. 4, 1888.

## CHAPTER 5

# Change & Readjustment, 1889-1919



After George Barnes resigned at the end of 1888 the Society was not quite the same. There was a loss of charismatic leadership, and concurrently, other elements that had contributed to previous success for the Society changed. Financial stress on the Society and loss of interest by the community were the two most significant of these elements contributing to a period of difficulty and change, especially between the years 1889-1904.

As the new century approached, San Diego was becoming a well-developed city as more people moved to the area and buildings filled the New Town area. With population growth emerged new organizations of every kind, including women's clubs, civic associations, and many specialized societies. Society membership decreased as people became less interested in the general study of natural history and joined groups specializing in their particular field of interest. The Floral association attracted those interested in plants. The Scripps Institution for Biological Research at La Jolla became a center for zoology and marine animal studies. Various government bureaus including the Horticultural Commission, Farm Bureau, Chamber of Commerce, and Weather and Forestry Bureaus were created. These agencies produced and distributed detailed information that was formerly only available from the Society.<sup>1</sup>

The ardent interest in natural science that had been so prevalent ten years before was waning. The Society's membership shrank until just a few naturalists remained to keep the organization alive. The emphasis of the Society shifted away from being a community institution to being an essentially closed scientific association. The pursuit of science for the sake of research motivated the small group sustaining the Society and there was little interest in attempting to regenerate the Society as it had existed in the past.<sup>2</sup>

This era of research proved to be most important in shaping the personality and reputation of the Society in years to come. Although the Society lost visibility within the community, the years 1889-1904 provided for a refinement of focus. What emerged was a Society not only devoted to the study of natural history but one which also encouraged a professional approach to science. Research and publishing would become two important goals developed during this time. As a result, the Society made itself more credible as a scientific institution and provided a strong basis for future growth.

After George Barnes retired, Daniel Cleveland assumed the responsibilities of president for a short stint. Monthly meetings were held at the B Street School house. In August 1890 it was announced that proceedings of the meetings were to be published in *West American Scientist*. There was also much discussion about how the collections could be displayed, the Society decided to purchase one used case.<sup>3</sup>

The problem of what to do with the collections was an ever-present subject of dissent. During these years Charles Orcutt maintained a firm grip on the collections and library by acting as librarian and curator, but also by storing the items at his residence.

Orcutt was overly possessive of the societies' collections. Not only was he interested in expanding and caring for the collection, he also liked to have the specimens conveniently accessible for his personal use and study. Over the years of his involvement with the Society, he perceived progressively less and less difference between collections owned by the Society and his personal accumulation of material. By 1888 his library report at the annual meeting stated:

In May, the collections of the Society were moved to my cottage on J street near 25th, where I have been able to partially catalogue them.<sup>4</sup>

This situation caused conflict among the members at different times during Orcutt's tenure. But the Society had little choice but to allow Orcutt to continue his work. They needed someone to care for the collections, and they lacked a permanent facility suitable for storage. In 1889 the on-going problem was described in this way:

At present, the collections and library of the Society

are deposited with Mr. C.R. Orcutt, and consequently not as accessible as would be desirable. It was suggested that the library belonging to the Society be placed in the rooms of the Public Library, to be used as reference books in the rooms and to be subject to recall at any time. No action was taken. It was further suggested that the museum of the Society be deposited in the basement of the B Street school building, where it might always be on exhibition to the public, and where it would be an aid to the school children, who are much in need of some accessible collection on this side of the bay...This would put the collections where they would be in little danger of fire and would be beneficial alike to the Society's collections, and to those who would be enabled to visit it.<sup>5</sup>

The Society members consciously avoided a direct confrontation with Orcutt about their dissatisfaction with the storage arrangements, but Orcutt was unlikely to be moved by subtle approaches. To anger Orcutt would be to banish his invaluable assistance. Members knew that until the Society had a permanent home of its own, collections were likely to remain scattered.

Although the Society was unable to take action on the dilemma concerning the collections and library, Charles Orcutt continued his work toward founding a museum. In August 1890, Orcutt again attempted to stimulate interest in the Society establishing a natural history museum by publishing another article in *West American Scientist* which re-introduced the prospectus for a museum. He wrote:

More than two years have passed since the prospectus of this institution was published. These two years have not been idle ones in its growth, though little external evidence has been given. A brief review of the object and scope of the institution may not come amiss at the present time.<sup>6</sup>

Orcutt, speaking as a member of the Society, hoped to spur his fellow members to action by describing what could be accomplished. In addition to his original plan, he now envisioned a botanical garden and experimental grounds as part of a complex of research facilities.<sup>7</sup> His plans for the scope had expanded and become more elaborate since his first rendition of the future museum.

But despite Orcutt's optimistic writing, it was clear that his expectations for what could be accomplished by the Society were markedly reduced. The article is much shorter than the original

prospectus and contains phrases alluding to the need to open the museum without worrying about the details of what will be contained there or how collections will be arranged. In addition to these comments, that issue of *West American Scientist* also contained references to his own museum and the progress being made towards its opening.<sup>8</sup> With or without the support of the Society, Orcutt was determined to see his own personal collection of natural history material transformed into an important museum.

In November 1890, Daniel Cleveland resigned as president after just one year of service.<sup>9</sup> This event caused the Society to lose what little momentum remained. His successor, B.F. McDaniel, continued to hold meetings sporadically at the B street school house and at private residences, but it was clear that the Society was headed for collapse. In December 1891 the Society held what would be the last regular meeting for several years.<sup>10</sup>

Three years of silence for the Society ended in February 1894 with a meeting. The members decided to resume monthly meetings and to try to involve members of the community known to have "considerable scientific achievements."<sup>11</sup> It was stated that the San Diego Ladies Club had passed a resolution to actively cooperate with the Society of Natural History in all practicable ways.<sup>12</sup> These were the first signs of recovery for the Society.

An immediate obstacle was a judgment for more than \$500 for the paving of Sixth Street and a lien upon the building lot owned by the Society. Help came in the form of a bequest from the will of George Barnes.<sup>13</sup> With the Society free from debt, the way was cleared for reorganization. Individuals who had seen the Society through its most difficult years were ready to move into a new era. Headed by Anthony Wayne Vogdes, the Society was poised to move forward.

Anthony Wayne Vogdes (1843-1924) was an amateur geologist and paleontologist. Like many of predecessors, he had little formal education in his fields of interest. Through his independent study, correspondence with scientists, and extensive collecting, he made significant contributions to the study of marine invertebrates of the Paleozoic.

Born in West Point, New York, on April 23, 1843, Vogdes came from a military family. His father was General Israel Vogdes, grand nephew of "Mad" Anthony Wayne, of Revolutionary War fame. Young Anthony graduated from West Point and was a professor of math. He started his military career serving in the 100th New York Infantry in 1863 and participated in the siege of Forts Sumpter, Wagner, Gregg, and South Carolina and was present at the Confederate capitulation at Appomattox. Vogdes re-enlisted after the war and was on duty with the troops guarding the Union-Pacific Railway beginning in 1867.

Vogdes' interest in geology began when he enlisted in the Civil War. His aunt gave him a bible and a volume on geology. These two books accompanied him through the war and influenced his interests. Vogdes' introduction to geological field work came during the war when he was detailed to duty guarding the advance construction gangs of the Union Pacific Railroad. His first collection of fossils was made while he was stationed at Fort Laramie, Wyoming. Reportedly, he spotted some fossilized shells while lying on the ground amid a rain of bullets as the soldiers defended the location against hostile Indians. The fossils lay among debris excavated while ground was leveled for the rails.<sup>14</sup> Among his finds were some trilobites, which especially attracted his attention.<sup>15</sup> From that time onward, Vogdes collected specimens wherever his military career placed him.

Vogdes became acquainted with government and railroad geologists during his years at army outposts in the midwestern section of the United States. Although Vogdes did not have an organized system for collections, he corresponded with others to gain information and make exchanges.<sup>16</sup> At one time, his collections of trilobites were probably the most complete in this country.<sup>17</sup>

Vogdes was also an avid bibliophile. His geological library numbered upwards of 40,000 titles; bibliographic index cards to his Paleozoic crustacea reached 60,000. He trained himself in the art of book binding and developed his own specialized library.<sup>18</sup>

In 1889 he became a Captain and one year later was promoted to major. He retired with the rank of Colonel in the spring of 1904.<sup>19</sup> For the last twenty years of his life he lived in San Diego. For Vogdes, involvement with the San Diego Society of Natural History was an excellent way for him to pursue his interests and become an active

member of his new community. As president of the Society he instilled new interest in scientific achievement.

Another inspiration during this time was Frank Stephens.<sup>20</sup> Stephens was an amateur naturalist especially interested in birds and mammals. He moved to New Mexico in 1875 and in 1891 participated in a survey of Death Valley by government scientists. Stephens came to San Diego with his wife in 1897 and they made their home in Campo. Mrs. Stephens died shortly after they moved to San Diego. Although it is not known specifically when Stephens joined the Society of Natural History, he seems to have become involved gradually over time, as his independent work on birds and mammals brought him together with other nature enthusiasts in the area. Frank Stephens continued his work by himself for a number of years after his wife's death before meeting Miss Kate Brown, an English woman only a few years younger than himself. Brown was also interested in natural history. They were married and the new Mrs. Stephens became a recognized authority on marine invertebrates. Both were involved with organizing the Natural History museum and served as co-curators of the museum for many years. Frank Stephens was the first director of the museum and also contributed to the effort over the years serving as a member of the Board of Directors, secretary, taxidermist, and author. He started the series of the Societies' Transactions, acting as editor and contributing the very first article, "Life Areas of California."<sup>21</sup>

In 1907 the Society took action with the lot on Sixth Street donated to them by the Morse's. They leased the lot to Crane Brothers who subsequently built Hotel Cecil. A room of the hotel was to be set aside for Society meetings and to display a representative group of the collections.<sup>22</sup> In January 1912 the Society held their first meeting in the new hotel. Later that month the exhibits were opened to the public several afternoons each week. This space did not solve all of their storage problems, but it was the start of the Society's holding meetings in a permanent home and the humble beginnings of a museum.

At this point the precedent for a museum had been set. With the public display of part of the collection, the members had renewed interest in making more and more material available to the public. In addition to space there would have to be cases built, specimens pre-

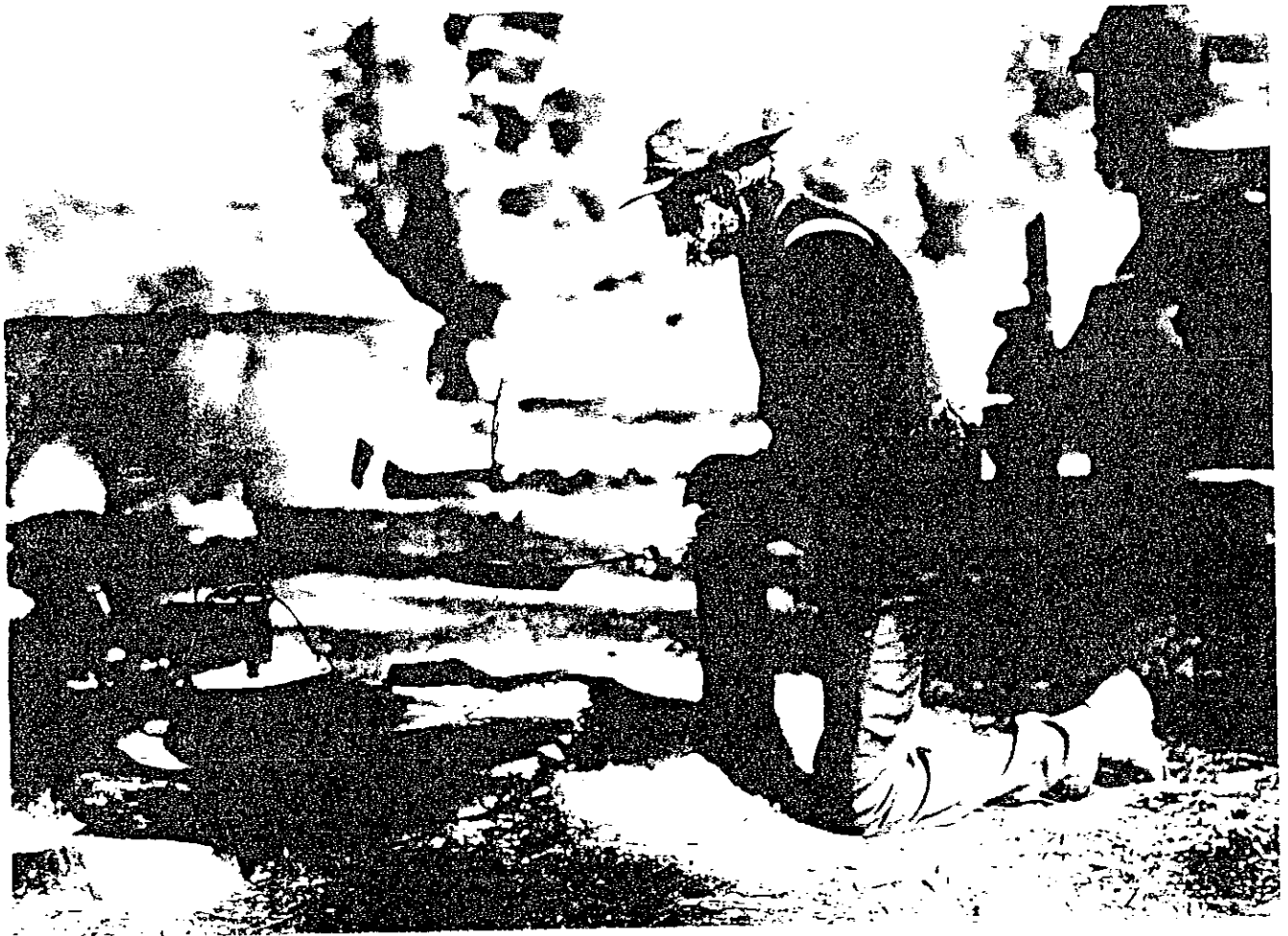
pared, and labels made. For the first time, the primary focus of the Society was to become a museum rather than nature study. The Society was finally ready to execute the task of opening a museum, demanded by Charles Orcutt a decade earlier.<sup>23</sup>



## Notes



1. Carroll DeWilton Scott, *The San Diego Society of Natural History 1874-1924*, (San Diego: San Diego Society of Natural History, 1924), p. 11.
2. *Ibid.* p. 12.
3. SDSNH, Minutes, Aug. 7, 1874.
4. *San Diego Union*, Nov. 2, 1888.
5. *San Diego Union*, Nov. 3, 1889.
6. Charles Orcutt, "The West American Museum of Nature and Art," *West American Scientist* VII, p.9.
7. *Ibid.* p.12.
8. *Ibid.* p.16.
9. *San Diego Union*, Nov. 27, 1890.
10. The discussion at this meeting centered around the severe financial problems. SDSNH, Minutes, Dec. 11, 1891.
11. *San Diego Union*, Feb. 4, 1894.
12. *Ibid.*
13. George Barnes died in 1890, but the money had apparently not become available until 1894. *San Diego Union*, 1/19/1894.
14. Charles Keyes, "Anthony Wayne Vogdes," *The Pan-American Geologist*, Vol. XLI, April 1924, No.3, pp.162.
15. A Trilobite is a crustacean from Paleozoic age, and has been extinct since the Carboniferous age. There are over 500 species of Trilobites.
16. Keyes, "Anthony Wayne Vogdes," pp.162-163.
17. Vogdes' large collection of trilobites is still used by paleontologists at the Natural History Museum.
18. Vogdes is best known scientifically for five volumes he wrote describing Paleozoic crustaceans. His extensive library including became a major



Frank Stephens flipping flapjacks in camp at Laguna Hanson, Sierra Juarez, Lower California, Mexico, November 1926. From the archives of the San Diego Natural History Museum.

part of the museum library after his death. Keyes, "Anthony Wayne Vogdes," p.161.

19. Montana, The Magazine of Western History, (Summer 1963), pp.2-18.
20. Frank Stephens was born April 2, 1849 in a log cabin in New York State. He moved to New Mexico in 1875 with his wife. San Diego Union, 1937.
21. Environment Southwest, 467 (November, 1974), p.10.
22. Letter, Crane Brothers to San Diego Society of Natural History Board of Directors, March 4,1907. San Diego Museum of Natural History Archives, Hotel Cecil Letter File.
23. Orcutt saw the beginnings of the museum opening at Hotel Cecil, but he was not an active participant in the Society by this time. In 1918 he donated his entire collection to the Society when it became clear that they were intent on opening a proper museum. Orcutt had been living away from California for many years and therefore was not actively involved with the activities of opening the new museum.



Hotel Cecil c.1912. The first exhibits of the San Diego Society of Natural History were displayed here several afternoons a week, starting in January, 1912. From the archives of the San Diego Natural History Museum.

## CHAPTER 6

### Epilogue: Into the Future



From the time the first small museum was opened in the Hotel Cecil, there was an on-going effort to open a large, permanent museum, but also to provide for the continuation of scientific research. In 1914, Crane Brothers proposed to sell the hotel building to the Society. This led to sharp disagreement and a split directorate because the facility was not readily suitable for a museum and because of the large amount money involved.<sup>1</sup> Fortunately, prudent members of the Board of Directors realized that they would jeopardize the future of the Society if they took on so large a debt. They remembered that it was fairly recently that the Society had almost ceased to exist because of debt. The Directors decided not to buy the building.<sup>2</sup> A short time later, fortune again befell the Society and the problem regarding a facility for the museum was solved.

Immediately after the close of the Panama-California Exposition in 1917, the Society leased the Nevada Building in Balboa Park, and there organized a larger display of natural history objects in its collection. The exhibits were open to the public daily. This was the first home of the Natural History Museum in Balboa Park.<sup>3</sup>

In the early part of 1920 the Society was assured a generous gift from Miss Ellen B. Scripps which allowed the museum to move to larger quarters in the Foreign Arts Building. After several months of preparation, the new and enlarged Natural History Museum was formally opened to the public at 10:00am December 18, 1920.<sup>4</sup>

The Natural History Museum collections soon outgrew their space in the Foreign Arts Building. The Society was able to arrange the move to the much larger Canadian Building. This provided a 300 foot long exhibit floor, spacious offices and workrooms, a lecture hall with stereopticon and motion picture projectors, and a large research room. It was here that the San Diego Society of Natural History cele-

brated its 50th birthday. Daniel Cleveland, second president of the Society, and George W. Marston, second treasurer — the two remaining original members — were present for the celebration.<sup>5</sup>

The Canadian Building, although much larger than the previous home of the museum, had major problems in the form of a leaking roof, sagging floors, rodent infestation, and the ever-present danger of fire. After the Civic Auditorium, diagonally across from the museum, burned in 1925 and a cyclone hit the area in 1926, the Society realized its pressing need for a permanent, adequate, and fireproof building. The City granted the site of the former auditorium for a new Natural History Museum. Miss Scripps paid for plans for the new building to be drawn by W. Templeton Johnson, and offered \$125,000 toward the building to be matched by public subscriptions.<sup>6</sup>

The building design called for a fireproof and earthquake-proof three story building, with two wings to the north, and an archway connecting an additional building across the street where the Casa del Prado now stands. Work was begun in 1932. Because of the Depression and lack of funds, only one building was completed, with a single wing, as it stands today. The new building was opened to the public January 15, 1933 and ownership turned over to the City.<sup>7</sup>

With the exhibits installed in their permanent home, the Board of Directors could turn their attention to creating policies to ensure the future success of the institution. The San Diego Society of Natural History would continue to exist, running the museum and publishing work by scientists there. However, the museum was now the central focus of the Society's activities.

No longer simply a club for nature enthusiasts, the San Diego Society of Natural History had evolved into the governing body of their museum and scientific research facilities. The overall success of the Society during its first fifty years of existence is proven by the institution the founders created — the San Diego Natural History Museum.

## Notes



1. SDSNH, Minutes Mar. 23, 1914.
2. SDSNH, Minutes, Mar. 26, 1914.
3. Scott, San Diego Museum of Natural History, p. 14.
4. Ibid. p.18.
5. Mary Hollis Clark, "History of the San Diego Society of Natural History" (unpublished report to the Strategic Planning Committee, October 1991), p.4.
6. Notes, n.d. (various typed notes and picture captions used to prepare exhibits on museum history). San Diego Museum of Natural History Archives, Museum History File.
7. Mary Hollis Clark, "Society of Natural History," p.4.