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#### *About the Institute*

The Hunt Institute for Botanical Documentation, a research division of Carnegie Mellon University, specializes in the history of botany and all aspects of plant science and serves the international scientific community through research and documentation. To this end, the Institute acquires and maintains authoritative collections of books, plant images, manuscripts, portraits and data files, and provides publications and other modes of information service. The Institute meets the reference needs of botanists, biologists, historians, conservationists, librarians, bibliographers and the public at large, especially those concerned with any aspect of the North American flora.

Hunt Institute was dedicated in 1961 as the Rachel McMasters Miller Hunt Botanical Library, an international center for bibliographical research and service in the interests of botany and horticulture, as well as a center for the study of all aspects of the history of the plant sciences. By 1971 the Library's activities had so diversified that the name was changed to Hunt Institute for Botanical Documentation. Growth in collections and research projects led to the establishment of four programmatic departments: Archives, Art, Bibliography and the Library.

UNITED FRUIT COMPANY

BANANERA - GUATEMALA

C. E. DELAWDER  
MANAGER

March 30, 1963

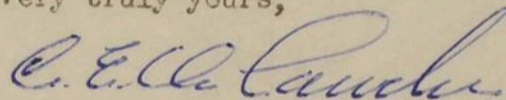
Mr. Bernard Lowy  
Agricultural Experiment Station  
Louisiana State University  
Baton Rouge, Louisiana.

Dear Mr. Lowy:

Your letter of March 26th to Mr. Pinto has been referred to me.

We will be glad to provide quarters during your visit to Bananera in July, and will look forward to seeing you at that time.

Very truly yours,



C. E. DeLawder  
Manager

312 Maple Street  
Burlington, Vermont  
November 1964

Dear Friends:

This has been a very busy year. With full time for research, I have devoted most of it to a study of Antarctic and Subantarctic lichens under a grant from the National Science Foundation (Antarctic Research Programs). I found time for proof-reading of my Tropical African Lichens IV and short papers on medical mycology. During the spring vacation, I succeeded in isolating the organism of Anne's chronic infection. It proved to be a species of Actinomyces, close to *A. bovis*, very anaerobic and soon died on most culture media tried. Anne spent July with us, working in our Laboratory of Microbiology at the Medical School and prepared an autogenous vaccine which has helped her greatly. As she was pregnant, we did not dare to try drugs or antibiotics for fear of adverse effects on the fetus. In early July I moved to a somewhat larger and more comfortable laboratory in the Agricultural Research Building. Recently I have found time to finish loans of tropical African lichens from Kew and Nairobi. Bertha has written our family news.

*Carroll W Dodge*

This has been a year of adjustment to our new environment in Burlington. We have attended to unexciting details of our house, having our cellar walls pointed up, our driveway resurfaced, our back porch closed in (there is a cellar beneath and a room above and we could see no sense in the exposed corner), and triple track storm sash on the two upper stories. The winter was unexpectedly mild and we survived it without trouble.

With Anne and her two girls with us in July and early August, we decided to forego the meetings of the International Botanical Congress in Edinburgh. Carroll wanted to get as much botanical work done as possible as we expect to be away for nearly two months beginning with Thanksgiving. We will spend Thanksgiving weekend with Anne and family in Coatesville, Pennsylvania. The next Monday we plan to go to Saint Louis where we hope to be able to visit some of our friends at least. Then on to Hawaii for a month with Mary's family. Anne has a new little girl, Caroline Mae Hooper, and Mary a new little boy, John Dodge Van Citters, so we have something special to look forward to. Though Carroll has passed through the islands en route to the Antarctic three years ago, I have never been there.

On the debit side for this year, I have lost both my elder brother and my mother. My brother's passing was sudden and as unexpected as any such event can be at about 70. Mother's going was slow and sad; she would have been 97 in December. Old friends too have disappeared from the scene. All this must be expected as the years pass, but we hope 1965 will be kinder.

We are mailing our greetings early as we will be away from home at the usual time for sending them.

*Bertha Dodge*

Merry

1964

1964

Christmas

Dear Friends,

Another year of adventure is nearly at an end. Vivian has gone from an enrollment of 41 in each of her two kindergarten sessions to 36 and the load seems to be much lighter. Every year she has an enthusiastic group of room mothers to help with various phases of the work and each year's group seems to be more cooperative than the last. The dry seasons of the last two years have resulted in poor collecting so that on some weekends it did not even pay to take the trips we did to Fort Hill, Old Man's Cave and elsewhere. Such seasons can help in getting paper work caught up. But other kinds of field trips have been taken and we have had a chance to see new sights we only dreamed about before.

On the Sunday before Christmas, after Church, we went out to the Binegers in Loveland for Christmas dinner and some of the events usually associated with Christmas day. In the evening after supper we stopped at Atlee's for a little Christmas preview, and on the way home we stopped in Madeira to see Carol's Christmas tree and then Mary's Christmas tree. On Christmas morning Bridge headed for the Greyhound station and the bus to Cleveland, while Ronald took Vivian to Loveland for Christmas dinner. After dinner, Ronald took Vivian and Eleanor to the Greyhound station with a brief stop at Ronald and Anne's apartment. They took a bus to Tampa, Florida, where they changed to a bus going to Bradenton, and at East Manatee they visited for several days with their father and Grace. This was a very pleasant stay and the weather was very cooperative. Bridge went to Cleveland to attend the meetings of the American Association for the Advancement of Science where he told a section on ecology about fungi in polluted streams in a valley in Idaho and Utah. Cleveland was cold, Florida was warm. The Christmas decorations were suited to the two areas except that Santa and reindeer seem a trifle incongruous in an orange orchard full of ripe oranges. Bridge returned home without incident and waited for Vivian to return. Northern Florida, Georgia, Tennessee, and Kentucky, not to mention Ohio, seemed to get a bit of weather about the first of January as the girls were to leave for the north. Instead of a quiet ride on New Year's, ice on the roads worked wonders on the bus schedules and they arrived about 12 hours late. Southern road crews were not prepared for the snow and ice storm which was experienced. As equipment became available and roads were opened the drivers did a man-sized job of getting the people and their luggage home from the Christmas vacation.

In February, Bridge again visited the Smith's in Ann Arbor where he took a few more Ohio agarics and gathered more information about other Ohio collections. He also spent several days in Jewish Hospital where Dr. Sidney Peerless saw what was visible of his oesophagus. On Good Friday we decided to take a trip into the coal fields of eastern Ohio to observe the streams, mostly in the Hocking River basin, into which water from the mines drains carrying with it the wastes called "acid mine drainage". We collected samples of water, bottom sediments, bank soils and the peculiar rusty or ochre sediments along the shores in order to study the populations of molds and yeasts which might occur there. In the evening we reached Groveport where we had a pleasant visit with Louise and Loren Crumley and their children. Louise and Vivian have traveled together and she visited us on Mount Shasta one year. Our visits to the farm are always pleasant and restful, especially when there is enough water in the creek to let Vivian catch a bass or a sunfish and a snapping turtle or two. This year the Ohio Academy of Science met in Cleveland at Western Reserve University and Bridge took the bus to Cleveland to attend and to tell a botanical section about some of the problems of studying pore fungi in Ohio. In March Bridge was invited to go to the Ohio Agricultural Experiment Station at Wooster to talk before a seminar on some of the possible hazards of irrigating with sewage in which potential plant pathogenic organisms were present. He spent part of two days in the laboratory of Dr. Lansing Williams looking at cultures of soil fungi, trying to identify some of them, and discussing various problems with staff members including Dr. Kurt Leben, chief of the plant pathology group at that station. Later in May the Michigan State University opened its new herbarium building and Bridge attended the series of lectures and supper given to celebrate the event. Toward the end of May it was again time to collect acid mine drainage samples. Bridge took a Greyhound to Wheeling, West Virginia, where he met Lee Purkerson and Ed. Fash of the Public Health Service Laboratory who took him to Morgantown. There they had a conference with Drs. Wilson, Barnett and Lilly concerning various aspects of the problem and of the growth of fungi in acid and in poorly aerated habitats. After a night in Morgantown they found a series of stations on streams carrying acid mine drainage and collected samples of the same kinds of materials as mentioned earlier. They returned to Wheeling in time for Bridge to catch a good Greyhound connection to Cincinnati. In June, Bridge and Vivian drove to Elkins, West Virginia, for another set of acid mine drainage samples. Here they were taken up through two

small stream valleys by Lowel VanDen Berg and had a chance to see some of the effects of such pollution. Before we went to Elkins we had a quick visit from Buzz and Lenore French of Billings, Montana, who were on a tour of the eastern midwest. We hear monthly from our Foster Parents' Plan child in the Philippines, Carmencita Perez. At nine years of age her letters are always pleasant. On Feb. 26 Jeffry Scott Cooke was borne to Bridge's nephew David H. Cooke, Jr., and Rosalie, in Salt Lake City. On March 2 Michael Gordon Williams was borne to Carol Elaine (Binegar) and Gordon Williams, and on Sept. 24 John Eugene Binegar was borne to Ronald and Annelise Binegar. In the meantime, plans were in progress for the coming summer. Passport applications for three people had to be processed, trip information had to be completed, vaccinations taken, tickets purchased, outfits obtained, but finally everything was ready.

On the morning of July 3 Norman, Eleanor and Diana Binegar drove up to our house, we loaded our things in the car, and we were on our way. Beyond Chillicothe we stopped at a roadside park for a picnic lunch, then drove on across southern Ohio, across the Ohio River to Parkersburg, had refreshments in Grafton, and finally stopped for the night on Mount Storm in eastern West Virginia. On the Fourth we drove into Washington, D.C., after arranging for a motel near Fairfax, Virginia. In Washington we hoped to see the Fourth of July fireworks spectacle but it was postponed because of a high wind. The next morning we returned to Washington for a day of sight seeing. We visited Mount Vernon, then stopped at Arlington National Cemetary to see President Kennedy's grave, the Tomb of the Unknown, and other features including the Lee Mansion, then we drove on across the Potomac into Washington, parked near the Capitol, walked through it and then up the mall to the Smithsonian Institution and the National Museum where we had supper. After supper we saw the fireworks, then returned to our motel. The next day we left Washington, but on the way saw the new Arlington Unitarian Church, the Lincoln Memorial, and stopped briefly at the National Fungus Collections at Beltsville. We drove around Baltimore to Philadelphia where we saw Independence Hall, then crossed the Delaware River to New Jersey and headed for the coast and its beaches on Long Beach Island. Near Toms River we found a motel for the night and the next day drove to Linden where we parked the car at our motel and took the train to New York City for a quick look at the New York World's Fair. By the next morning all our bags had been re-packed, we took our suitcases and other traveling bags (the ladies called them purses), and again took a Pennsylvania Railroad train to New York. A taxi took us to Pier 91 where the Queen Mary was waiting for us and a couple of thousand other tourists. Promptly at 1:30 the gates were opened and after registering our camera we got in line to board the Queen in the Cabin Class area. Eleanor and Norman followed along in a visitor's line to see us off. We found our cabin, got our luggage together, found all the points we would need to know about, then after Eleanor and Norman had to leave we watched the procedure of casting off. It was a rainy day and a life boat on the Sun Deck provided a good umbrella. As we went down the Hudson River to the Atlantic we had our last glimpses of New York City, the Statue of Liberty, the new suspension bridge, and to crown the afternoon, a life boat station drill in life jackets. We were on the high seas as we sat down to supper. Our table companions formed a jolly group and our waiter was a happy person who helped make the trip pleasant. The five days on the boat went rapidly with three leisurely meals, a movie every day, evening entertainment, a swimming pool, afternoon tea in the deck chairs, and all the leisure which could possibly be crowded into a schedule as busy as the purser and his staff could make it.

All too soon the shores of France appeared and the ship docked in Cherbourg. We had "reservations" on the boat train which took us into Paris. This was one of the few coal powered trains we traveled on in Europe. We reached Paris on the evening of July 13 and found a room in the Atlantic Hotel. In the morning we took a walk toward the Arch of Triumph which we reached just after a parade in which President de Gaulle took part and gave a speech broke up. We walked to the Eiffle Tower, had cokes on the first level, viewed the city from this level, then walked through a park to a small sidewalk cafe for lunch, then by subway to the Botanical Gardens, a walk along the Seine, around the Cathedral of Notre Dame, another subway ride to the vicinity of the Paris Opera, a walk around the Opera building, and then back to our hotel. Bridge took the subway to the railroad station from which we were to leave for Geneva, bought our train tickets, found the trip too rough to try to take with luggage, and returned to the hotel. After a good night's sleep we took a taxi - what a ride - to the railroad station, found the train to Geneva but got on the wrong car, and left Paris on time. Warning: Do not plan to spend only one day in Paris on Bastille Day!

The conductor finally got the idea across to us that we were on the wrong car for Geneva and the right one was up ahead. We went up ahead as many cars as we thought he said. He caught up with us and sent us ahead two more cars. Finally we were on the Geneva car and we had a pleasant ride across the plains of France to the hills along the Rhone River, then up the Rhone to Geneva. While Vivian and Diana waited for Bridge he checked on trains to Zurich, then we went across the street to a hotel recommended by a book on how to see Europe on \$5 a day. We got a comfortable room in the Montmorillan Hotel and then had supper in the restaurant on the ground floor. In the meantime Bridge checked on buses across the Swiss mountains but could get no information. We walked along the lake, past the Botanical Garden, almost to the old League of Nations Buildings, but it got too dark and we returned to the city. The lake front was beautiful with the lights, the fountain, the swans, the sunset, and Mont Blanc in the alpenglow beyond. In the morning we took a train for Montreux at the head of the lake. There Vivian and Diana waited in the station while Bridge

3  
looked for a way to find the bus service to Zurich. Finally, at an office of Thos. Cook, Ltd., he was able to buy the desired tickets. We had about 4 hours to kill and after lunch and shopping we went to the post office which is also the bus station. The bus came on time and Erika the stewardess loaded us on and took our tickets. The driver put our luggage in the luggage carrier, a trailer on the rear of the bus. We left Montreux by passing Chillon Castle at the edge of the head of Lake Geneva. The bus went up the Rhone Valley, then climbed the mountain to Golden Pass and down to Gstaad for a rest stop and a snack at a sidewalk restaurant. The weather was warm and pleasant. At Gstaad the stewardess made reservations for us at a hotel in Interlaken where the bus deposited us on its arrival. The trip from Gstaad to Interlaken was delightful. We drove down a valley to a pair of lakes on the isthmus between which Interlaken is built. After supper at the Hotel de la Paix we shopped in the town until the stores closed. After breakfast a second Europabus stopped for us. Margaret, the stewardess, took our tickets, the driver placed our luggage in the carrier behind the bus, and we were off up the Aare River valley. The Swiss buses have a very interesting horn. It has three distinct loud clear notes which can be heard around most of the hairpin turns. The drivers sound the horn for every bad curve. The roads are narrow and the hairpin curves short. We passed two large water storage reservoirs in the Aare Valley, stopped for a rest at Grimsel Pass, visited the St. Christopher chapel plain church, then dropped down to Gletsch in the Rhone Valley and started the ascent of the Furka Pass to Belvedere where we visited the Rhone Glacier walking into a tunnel in it on boards. After lunch at Belvedere, and views of many alpine flowers, we drove over the Furka Pass and down the Devil's Canyon to Lake Luzern. At the highway tunnel in the Devil's Canyon we were allowed to walk on the old highway while the bus drove the new one. The experience was interesting and we got some good views of canyons and waterfalls. From Belvedere Margaret had phoned ahead for reservations and the bus dropped us at a hotel across the street from the railroad station in Luzern. After supper in an "alcohol-free" restaurant in the hotel we went to the Casino to be entertained by a local troop of dancers, yodelers and horn blowers. It was very interesting and entertaining. The train we took the next morning dropped us in Zurich where we changed trains for Innsbruck. The station was very crowded and it seemed as if we might not make the connection. This was the only time we got on a European train which was late. The trip through eastern Switzerland took us through mountain country and across the Arleberg mountain pass into western Austria. We followed the Inn River down to Innsbruck. While Vivian and Diana waited at the station, Bridge found lodging in the Annex of the Pension Stoi in the form of two rooms in an old building beside a service station and garage a block from the railroad station. After a light supper we walked around the older part of the city seeing many of the sights usually seen by tourists. While the girls caught up on their diaries, Bridge investigated the possibilities of the next leg of the trip. While reservations could not be obtained, it was decided to continue on with plans and go to Venice. So after breakfast we boarded the southbound train across the Brenner Pass and headed for Venice. We found that in some cars no reservations were needed and after crossing the Brenner Pass into Italy we followed a long valley lined with vineyards to Verona and Venice. Because of a change in exchange rates an Italian railroad official collected extra money for the portion of our ticket to be used in Italy. We reached Venice late in the afternoon, found a room in Hotel Espagna, and took a ride on the Grand Canal in a vaporetto, a sort of street car type of boat. After going the length of the Grand Canal to The Lido we returned to the Santa Lucia Railroad Station for supper, then shopped for Venetian souvenirs and turned in. The next leg of the trip took us through eastern Italy into Austria and Vienna. Here we took a room suggested by a hotel reservation bureau in the railroad station through which we reached Vienna. A taxi took us to the Pension Reimers and after a light supper at a coffee house down the street we turned in. We saw most of the older part of Vienna by walking around the Ring. At St. Stephen's Church we took an elevator to the top of a tower from which we could see most of the city. A taxi took us the next morning to the Railroad Station from which we took a train to Salzburg where we changed to another train going to Munich. Here we stopped for a night, did a little shopping, saw some of the sights of the city in the vicinity of the hotel and railroad station where we ate supper. Our next stop was Frankfurt where we changed trains for Kassel. At Kassel we were met at the station by Anne Binigar's sister and her husband. While Heinz took Vivian, Diana and the luggage to the Kratzenberg apartment, Renata helped Bridge buy tickets and make reservations for the trip to Amsterdam. Then Heinz was ready to take them to the apartment where a fine supper was enjoyed by all. After supper young Rudiger was taken home and put to bed and then the whole group enjoyed an evening of family talk. In the morning we saw the Hercules monument on a hill near Kassel, an exhibit of Rembrandt paintings at the Kassel Art Museum, and a part of the International Modern Art festival at the Kassel exhibition hall. All too soon it was time to catch the train to Amsterdam, through the Ruhr. In Amsterdam the hotel reservation bureau helped us find a room at the Hokabergen Hotel along a canal. In the morning we took a canal boat tour of Amsterdam, and in the afternoon a bus tour of the Zuyderzee country north of Amsterdam. We ferried to North Amsterdam, toured a small cheese factory at Broek, took a boat to Marken, another boat to Volendam, and returned in the bus to Amsterdam. The next leg of our trip put us on a train at Amsterdam bound for Hoek van Holland where we boarded a ferry boat for the 6-hour crossing to Harwich, England. The boat was full but in all that mob we found one acquaintance, Dr. and Mrs. C. W. Hesseltine of Peoria. At Harwich we were met by Dr. A. F. Parker-Rhodes, his wife Demaris, and their daughter Oriole, of Cambridge. In their Bedford van, a panel truck outfitted with seats, we drove to Cambridge with

a picnic stop at Flatford Mill, a tour through the grounds, and a visit to the Elizabethan house in which the caretaker lives. Cambridge became our base of operations for nearly a week. We saw the town and the University from the front and the Backs, the Backs by punting on the Cam, Frederick and Demaris manning the oar with Oriole taking a turn. We visited the Cambridge Botanical Garden, several of the colleges, the country manor at Audley End, and an ancient church at Thaxted. We all drove to Kew Gardens for a day and another day was spent driving to Stratford-on-Avon where we saw the Shakespeare memorials, the play Henry V, Ann Hathaway's Cottage, and had a picnic lunch along the Avon. There, too, we met the Pomerleau's from Quebec. On one day we took the train to London, saw the changing of the guard at Buckingham Palace, Big Ben, Westminster Abbey, ate lunch near the Thames River, took a sightseeing boat down the Thames to the Tower Bridge, visited the Tower of London, saw the crown jewels, and returned to Cambridge by train. Time goes too quickly and soon we were again on the rails on the way to Edinburgh.

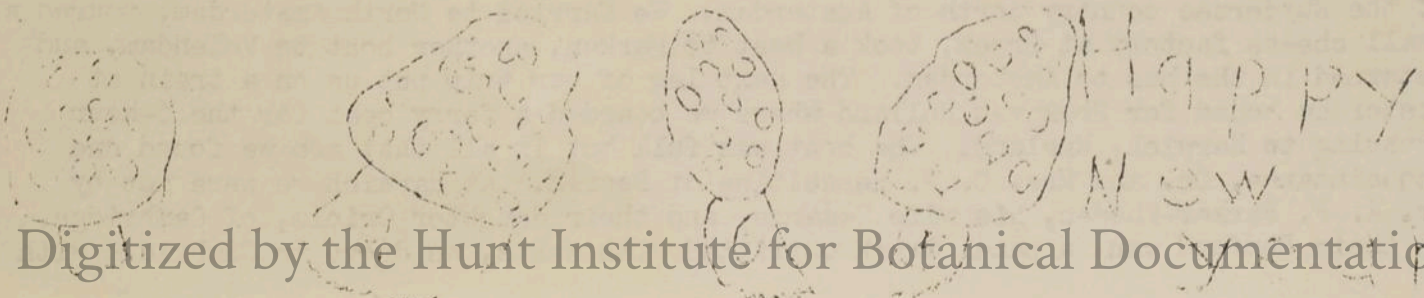
At Edinburgh we had been assigned to rooms with Mrs. Ivy Rennie and her family. A taxi helped us locate 89 Comely Bank Road, we settled in, then took the double deck bus to the headquarters of the X International Botanical Congress at the University of Edinburgh. Here we completed registration, got mail and news from home, met and renewed acquaintances. On Sunday Vivian and Bridge walked a bit around downtown Edinburgh and Princes Park to get acquainted with the city, and Monday morning we all went up to and through the Castle. As in London, the Castle had a jewel room which we visited. In the afternoon we attended the reception at Lauriston Castle for Congress members, and in the evening Vivian and Bridge attended the First Plenary Session of the Congress. While Bridge attended the sessions of the Congress in which he was interested, Vivian and Diana took a series of tours to Bass Rock, North Berwick and Tantallon Castle; Loch Lomond and the Trossachs (in the rain); Oban and the Western Highlands; Ayr and the Burns Country (in the rain); the Roman Wall, Housesteads and Corstopitum; the mills of Munrospun; and parts of Edinburgh itself. On the Sunday of the Congress we all went on the Congress field trip to the nature sanctuary of Ben Lawers where we climbed nearly to the top of the ridge called Meal Nan Tarmighan. It was a very steep slope and very wet but Diana got nearer to the top of the 2000 foot rise than either Vivian or Bridge. The flowers were beautiful but the sheep had better footing than the humans. After the final Plenary Session, Diana went sightseeing and shopping, while Vivian and Bridge visited the Edinburgh zoo after shopping a little. The penguins stole the show but the whole visit was interesting.

That evening, after everything was finished, we boarded the night sleeper train for London. The second-class berths were a little smaller than we are used to, but we slept well. The train made only one stop and we left it before 7 in the morning. We took a taxi to the station from which the Southampton boat train would leave, waited for the train, boarded it for our last train ride in Europe, and it finally pulled up along side the Queen Mary at her pier in Southampton. Without difficulty we boarded the ship, carrying our luggage, found our stateroom, and again became familiar with the ship. Emergency drill was conducted as we were leaving Southampton and before we reached the broad Atlantic we stopped to pick up passengers at Cherbourg. The crossing was uneventful, our table companions were friendly, and our second waiter made the meal times very pleasant. At the dock in New York we waited about 2 hours for our luggage to be unloaded (we could have walked off with it), then took a taxi to the bus station where we found a Greyhound almost ready to take us through Philadelphia, across the Pennsylvania Turnpike to Harrisburg and Pittsburgh, then on to Columbus. We changed to a Cincinnati-bound bus which dropped us at Montgomery only 16 hours after we left New York. Eleanor, Carol and Ann were waiting for us, we went to Loveland, and after lunch Eleanor took us home to Mt. Washington. It was a most eventful and memorable trip and we are only sorry that we could not stay longer and visit more of our friends and correspondents.

Since our return things have been rather quiet. We took a trip to Old Man's Cave and one to Fort Hill, but both times things were too dry for good fungus collecting. In October we went to Columbus for the autumn meeting of the Ohio Branch of the American Society for Microbiology. After this meeting we stopped at Groveport where we visited the Crumleys and showed them pictures of the European trip. Then we went down into the Hocking Valley to collect a second set of acid mine drainage samples with a stop at Ash Cave on the way home. To celebrate her completion of three summer's work in our laboratory, Anne Shreve and her parents entertained us and Mr. and Mrs. Henry Tabak, who handles the biochemical end of our work. The new Fujica camera has turned out to be a very useful one. Only about 870 of the pictures it took for us in Europe can be shown. We showed them all in one afternoon and evening to Diana's family - never again! Meetings of the Cincinnati Wild Flower Preservation Society continue to be interesting. St. John's Unitarian Church is celebrating its sesquicentennial year this year with interesting programs.

We hope all our friends and correspondents have a very Merry Christmas and a Happy New Year.

Vivian and Bridge



Belém 10 de Maio de 1966

Caro amigo Lowe

Cheguei bem até aqui, já falei  
lá no Hotel Assai, e será possível o  
sr. hospedar-se ali.

Em Belém procure o dr. Novaes  
no Museu, ele lhe indicará o  
caminho,

Caro tiver alguma dificuldade  
procure o dr. Murea Pires no  
Agronomia, ele também está  
no Hotel Assai

Si eu não estiver em Belém  
pode deixar ~~para~~ com o dr.  
Novaes no Museu, qualquer  
coisa para mim, ele me  
entregará quando eu voltar  
sem mais no momento  
envio-lhe o meu grande  
abraço

Emílio

Fundação Rockefeller  
C. Postal 636 - Belém - Pará

TAIWAN PROVINCIAL CHUNG-HSING UNIVERSITY

COLLEGE OF AGRICULTURE

TAICHUNG, TAIWAN, CHINA

DEPARTMENT OF PLANT PATHOLOGY

Dec. 30, 1966

Dr. Bernard Lowy  
Prof., Department of  
Botany and Plant Pathology  
Louisiana State University  
Baton Rouge, Louisiana  
U. S. A.

Dear Dr. Lowy:

May I beg your pardon to present myself to you that I was graduated from the Department of Plant Pathology, Taiwan Provincial Chung-Hsing University, in 1963. After receiving one year of the reserve officer training in the Chinese Air Force, I have served as an assistant in my Alma Mater. Having been a teaching assistant, I also engaged myself in research as a project employee in the Dept. of Plant Pathology.

I am very interesting in the courses of your department. Resently, I have been told that your Dept. has a certain number of admissions and assistantships available for foreign students each year. I take this opportunity to ask what the procedure is for entering your Univ. as graduate student. During the college years, my graduation grade was B. If this condition will be qualified by your Univ., I wish you could kindly consider granting me a copy of application form for an admission with assistantship. If my request meets with your approval, I shall mail all-necessary certificates to you immediately.

Tanking you in advance for your attention to my application.

Very truly yours,

Dung-Kai Ding

Dung-hai Ding

22 de Diciembre de 1966

Muy estimado amigo Dente:

Faz muito tempo que nao estamos en comunicacao, assim que aproveito a oportunidade agora de escreverle algunas noticias de aqui. "ais realmente não tenho coragem de continuar a escrever em Portugues, idioma que aprendi so "a la criolla" .. melhor pois si continuo en Espagnol. Pienso mucho en el año que pasé en su magnífico país y en particular de la temporada breve pasado en Amazonas. Lamento que no me encontré con Vd. en Belém en Junio mientras asistí a las sesiones del Simposio. No obstante fui a visitar a Dr. Conduru en el Museo Goeldi mas el no estaba alla en el momento. Los 30,000 cr, según nuestro acuerdo dejé en un envelope para Vd. con la Señora del Doctor.

Los pájaros que mandé en avión de São Paulo llegaron a Baton Rouge en condiciones excelentes y mi colega Dr. Lowery está muy contento con ellos. Le gustaría recibir más material de Vd. y está de acuerdo con el precio de \$1.25 cada uno. Por el momento tiene fondos hasta \$360.00 o que sea para el equivalente de 240 especímenes. Pide que tenga Vd. la bondad de incluir con cada encomienda tres copias de la cuenta indicando nada más que el número de los especímenes y el precio total. Como prefiere recibirlos mandado por avión, claro que él pagará este costo también. Me indicó Dr. Lowery que tiene preferencia para parejas (casals) cuando posible y en particular de la costa del país, pero aceptará colecciones de cualquier otra parte igualmente. El pagamiento tendrá forma de cheque internacional hecho en su nombre. Escribeme por favor, la dirección donde Vd. prefiere recibirlo .. o en São Paulo o en Belém. Incluido con esto se encuentra la dirección que Vd. debiera usar en mandar los paquetes. Si Vd. tendrá cualquier pregunta voy a probar a aclararlo lo mejor posible.

Reciba con esto mis mejores votos para su felicidad en el año nuevo y un abrazo cordial de su amigo

Bernard Lowy

São Paulo 30 de Janeiro de 1967

Caro Dr. Lourey

Recibi sua carta de 22 de Dezembro, fiquei contente em ter suas noticias. Posso enviar passaros para o Dr. Lourey, porem ainda terei que caçar-los, no momento só tenho 30, mas com 2 ou 3 pequenas viagens se completo 240.

Vou remete-las pelo Coli-Postaux aéreo em pequenos pacotes, e terei que tirar guisa de embarque no Banco do Brasil.

Quanto ao cheque, o sr. podrá remeter em meu nome com este endereço - Rua Padre Raposo 834

São Paulo - Brasil. Se possivel, mande 20 dolares a mais para despesas de embarque, no final das remessas eu enviarei uma conta em 3 vias com a conta total.

Sem mais aguardando sua resposta, envio-lhe votos de um feliz ano novo, com o meu cordial abraço

Emílio

Dr.

San Miguel de Tucumán, 2 de mayo de 1967

Mycological Herbarium  
Louisiana State University  
Baton Rouge  
Louisiana, U.S.A.

Estados Unidos de América

MINISTERIO DE EDUCACION

Dr. Bernard Lowy  
Mycological Herbarium L.S.U.  
Baton Rouge, Louisiana. USA.

Universidad Nac.

Fundación - Instituto

Miguel Lillo 205

LEY 12.928

San Miguel de Tucumán

Mi estimado Bernardo:  
(R. Argentina)

Nos ha llegado la caja conteniendo los ejemplares. Ya anteriormente había recibido su amable carta del 15 de febrero. Exitos con los ejemplares recogidos en Brasil aún cuando hayan tardado tanto en llegar.

La traducción del libro de Alexopoulos ya está a la venta. Lo editó Eudeba (Editorial Universitaria de Buenos Aires). 1966. Alexopoulos, Introducción a la Micología, 615 pgs.

Siempre recordamos nuestro fugaz encuentro en hotel de Buenos Aires. Esperamos que pronto tengan oportunidad de visitar la Argentina nuevamente. Mi esposa y yo estamos ahora viviendo en la Residencia Universitaria de Horco Molle.

Con saludos nuestros para Vds.

muy cordialmente

*Antonio Digilio*

ANTONIO DIGILIO

RIJKSHERBARIUM,  
Schelpenkade 6,  
Leiden.-  
Netherlands.

No. 1999.

Leiden, 9th October 1967.

Dr. B. Lowy,  
Department of Bot. & Pl. Pat.  
Louisiana State University,  
BATON ROUGE  
U.S.A.

Dear Dr. Lowy,

Thank you for your kind letter of September 28. Under separate cover I have now mailed to your address (by surface mail) a copy of my "Check list of European hymenomycetous Heterobasidiae". Of course, you should have received it some time ago in exchange of the many valuable papers on the same group you so kindly sent to me, but somehow it escaped my attention that no copy was forwarded to you; for which omission I tender my apologies!

With kind regards,

Sincerely yours,

*M. A. Donk*

(M. A. Donk)

Dear Friends,

I hope things are going well and that the New Year will be good to you. Dean deBarnett paid a visit to the Bay Area and I had the privilege of showing her Muir Woods, Carmel, and the Monterey coast.

You'll remember Helen Danow who married Norman Jacobs. Their son, Norman Jr., graduated from the U. of Connecticut O.B.K., with a Medical School scholarship. In August he was married. I also have word from Lillian Skalak. Things seem to have summed down at L.S.U. Dean

H. P. DESORT  
7960 Sunkist Drive  
Oakland, California 94605

Merry Christmas  
and  
Best Wishes  
for a

Happy New Year

deB says the future seems assured for at least 5 years.

Sincerely,

Helen Desort

new address:  
7960 Sunkist Dr.  
Oakland, Ca. 94605

WASHINGTON STATE UNIVERSITY

PULLMAN, WASHINGTON 99163

DEPARTMENT OF PLANT PATHOLOGY

July 25, 1969

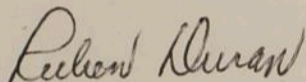
Dr. Bernard Lowy  
Dept. of Botany and Plant Pathology  
Louisiana State University  
Baton Rouge, Louisiana 70803

Dear Dr. Lowy:

I have on hand a specimen (#548) identified as Testicularia cyperi Klotzsch collected at Ward's Creek, Baton Rouge, Louisiana on August 17, 1924. I assume, but am not sure, that you sent the specimen to George W. Fischer with a few others ~~and~~ a number of years back.

We have never been sure about the family affinities of this species and would like to demonstrate germination of its teliospores. This is to ask that if you chance upon this species around Baton Rouge would you send me a specimen? As long as I am imposing upon you, I would be delighted to receive any and all smut fungi you may run upon.

Yours truly,



Ruben Duran

RD/ch

September 28, 1967

Dr. M. A. Donk  
Rijksherbarium  
Schelpenkade <sup>b</sup>  
Leiden, The Netherlands

Dear Dr. Donk:

I am currently working on a survey of the tremellaceous fungi of neotropical America, an area where I have been concentrating my attention for some years.

Your recent papers in *Persoonia* (Vol. 4, Pt. 2 and 3, 1966) on European ~~Heterobasidiae~~ are an indispensable source of valuable information and it would be a great convenience to have your work at hand constantly, rather than having to borrow it for brief intervals from our library, as I am doing now.

Kindly enter my subscription for volume 4 and I shall gladly remit the cost upon receipt of the bill.

With best regards.

Sincerely yours,

Bernard Lowy, Professor  
Dept. of Botany

jl

Querido Bernard:

te envío sólo unas líneas  
para decirte que orientes y aconsejes en lo  
que quedas a Jorge Debaune, que aparte  
de ser un buen compañero de trabajo es  
un gran amigo mío y de mi marido. -

Un gran abrazo de Chacha

Aparte envío una carta para las 3 mujeres  
de tu casa. - Gracias anticipadas por lo  
que hagas con respecto a Debaune. -

22/9/69

2 de Octubre de 1969

Sr. Jorge Luis Debanne  
Cangallo 2272, 6<sup>o</sup> 23  
Buenos Aires, Argentina

Estimado Sr. Debanne:

Tengo a mano su carta del 23 de Septiembre y quiero informarle que dentro de poco tiempo Vd. debiera recibir algunos informes del Departamento de "Food Science" de nuestra Universidad. Voy a entregar su carta a Dr. Arthur Novak, un colega mio quien es jefe de dicho departamento.

Claro, Vd. entiende perfectamente bien que no es posible ofrecerle ninguna clase de garantía en cuanto a las becas disponibles antes de conocer y evaluar los cursos con los cuales Vd. ha cumplido en la Universidad de Buenos Aires. De todos modos, les van a mandar a Vd. un cuestionario que debiera llenar y devolver con todos los datos necesarios.

Le saluda atentamente

Bernard Lowy  
Profesor de Botanica

Buenos Aires, 13 de Octubre 1969

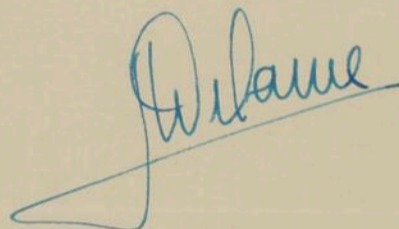
Dr Bernard Lowy  
534 Highland Park  
Baton Rouge, La

De mi consideracion :

He recibido su carta del día 2 de Octubre, y quiero agradecerle la atencion que me dedo e mi pedido.

Estoy a la espera de los formularios que Ud me anuncia, recibire' en fecha proxima. Se le hara saber en cuanto los mande.

Saludo a Ud atte





WILLIAM J. DODD  
STATE SUPERINTENDENT

STATE OF LOUISIANA  
DEPARTMENT OF EDUCATION  
BATON ROUGE 4

November 4, 1969

Dr. Bernard Lowy  
Bontany Department  
Louisiana State University  
Baton Rouge, Louisiana 70803

Dear Dr. Lowy:

I wish to personally thank you for your contribution to the Louisiana Disaster Fund. This assistance is going to help thousands of our citizens who are attempting to rebuild the utter devastation dealt by Hurricane Camille.

With your help, we received a total of \$15,954.72 from citizens and organizations representing every phase of education. Many more notified us that they had already contributed through other sources.

I have visited the hurricane-stricken areas and I know from talking with these people that they will always be grateful for your generosity at a time when their need was so great.

Sincerely,

William J. Dodd  
State Superintendent

WJD/RH/mw

PRODUCTS RESEARCH SERVICE  
INCORPORATED

Biology Dept. - L. S. U. Baton  
Rouge

5-23-1972

Belle Chasse, La.

Louisiana Conservationist Magazine

400 Royal St, N.O., La., 70130

Dear Sirs;

Do you have any information on whether the Morell or sponge  
Mushroom occurs in Louisiana and if so in what part? Or do you  
know where any information on this type of mushroom can be  
obtained?

Truly yours

Howard C. Dick

Howard C. Dick

Box 159

Belle Chasse, La. 70037

P.S.: Would you please enter as a subscriber to your magazine the  
following persons:

~~Mrs. Dirk van Battum  
1410 Thomas st.  
Gretna, La. 70053~~

~~Mr. J. B. DelCarpio  
5639 $\frac{1}{2}$  Charles Place  
New Orleans, La. 70124~~

Thank you. H. C. D.

LOUISIANA STATE UNIVERSITY  
AND AGRICULTURAL AND MECHANICAL COLLEGE

BATON ROUGE • LOUISIANA • 70803

*College of Arts and Sciences*

DEPARTMENT OF BOTANY

May 26, 1972

Mr. Howard C Dick  
Box 159  
Belle Chase, La. 70037

Dear Mr. Dick:

Your letter of May 23 has been forwarded to me. The morel (*Morchella* spp.) is of rare occurrence in Louisiana. I have a small collection of it from the Shreveport area which may represent the southernmost limit of this fungus in the state. It is extremely common throughout the central U.S. but it has never been successfully cultivated.

A good general reference book which includes the morel and other edible (and inedible) mushrooms is:

A.H. Smith. Mushroom hunter's field guide. revised edition 1963.  
University of Michigan Press. Ann Arbor, Mich.

Sincerely yours,

*B. Lowy*  
Bernard Lowy  
Professor of Botany

LOUISIANA STATE UNIVERSITY  
AND AGRICULTURAL AND MECHANICAL COLLEGE

BATON ROUGE • LOUISIANA • 70803

College of Arts and Sciences

DEPARTMENT OF BOTANY

17-I-1973.

Herman —

Thanks for increasing my awareness of  
the problem. Population, poverty, pollution,  
plutonium and politics are among the "P's"  
that threaten to engulf us and one  
or more of them probably will, because  
time is running out. And Peace?

You may count on my support should you  
decide to launch an article against any or all  
these monsters. — As you may know, I  
am a great aficionado of Quijote.

Bernard

Herman Daly

RIJKSHERBARIUM, Schelpenkade 6, Leiden.- (Netherlands)  
=====

No. 327.

Leiden, 1st March 1973.

Dr B. Lowy  
Louisiana State University  
Department of Botany  
Mycological Herbarium  
BATON ROUGE.-  
La 70803  
U.S.A.

Dear Dr Lowy,

Thank you for your appreciative words.  
I shall pass your letter on to Mrs Donk, for whom the  
blow was very hard indeed.

I cannot say I felt very friendly to-  
wards him, but I agree with you that Donk's passing  
away is an "immeasurable loss to mycology". He was a  
genius.

I checked Dr Donk's mailing list and  
found your name there, so one day you will find on  
your desk a reprint of my paper "Dr Donk, his life  
and work".

Yours sincerely,

*R.A. Maas Geesteranus*  
(Dr R.A. Maas Geesteranus)

JHL.

LOUISIANA STATE UNIVERSITY  
AND AGRICULTURAL AND MECHANICAL COLLEGE

BATON ROUGE · LOUISIANA · 70803

College of Arts and Sciences

DEPARTMENT OF BOTANY

21-II-1973

Dear Dr. Gaesteranus,

With deep regret I have just received the sad news of the death of Dr. Donk. The loss to his family, close friends and colleagues is surely great and the loss to mycology is immeasurable. A man of his enormous competence is rarely found and his contributions to mycology can only be compared with the most significant that our science has produced in modern times. I profoundly lament his passing.

Sincerely,

B. Hedwig

# Campus Correspondence

LOUISIANA STATE UNIVERSITY

FROM: *Glenn Dimopoulos*

TO: *Bernie:*

DATE: *April 3, 1973*

Regardless of the outcome on the successful candidate for the position of Dean of the Graduate School I want to thank you for your support of my application for the post. I am sure that your letter will be important as the selection committee evaluates my credentials. Thank you ever so much.

from: E. R. Chubbuck, Chairman  
Graduate Dean Search Committee

to: Graduate Faculty

date: January 23, 1973

Re: Nomination of candidates for the position Dean of the Graduate School.

As most of you already know, Dr. Max Goodrich, Dean of the Graduate School plans to retire July 1, 1973.

At the very end of last semester, Vice Chancellor Murrill appointed a committee to search for a successor to Dean Goodrich.

The Search Committee invites nominations by members of the Graduate Faculty for this position. I am sure that most members of the Graduate Faculty have in mind already the attributes a graduate dean should possess, but let me repeat those mentioned in Dr. Murrill's letter to the members of the Search Committee:

1. Earned doctorate.
2. College teaching.
3. Administrative experience in higher education.
4. Knowledgeable and experienced in curriculum design, development, and evaluation.
5. Able to work with faculty members with varying backgrounds and experience, and under a variety of conditions in curriculum development and research.
6. Capable of coordinating research activities for Academic Affairs.
7. Capable of developing long range plans and strategies for implementation.
8. An understanding and acceptance of the mission of the Baton Rouge Campus of LSU.
9. An awareness and concern for the needs of graduate students.

The nominees may be either on or off campus and need not presently have academic positions. Because of the large number of nominees we anticipate, we insist that each nomination be accompanied by rather complete documentation of the credentials of the nominee.

Since time is rather short, your nominations should be made as soon as possible (perhaps by March 1, 1973).

If a person feels himself qualified and would like to be considered for the position, he may nominate himself; this procedure will in no way prejudice the committee.

Send your information to E. R. Chubbuck, Engineering Science Department, Louisiana State University.

Thank you very much for your help.

*Edwin R. Chubbuck*  
Edwin R. Chubbuck

acs

*Out*

LOUISIANA STATE UNIVERSITY  
AND AGRICULTURAL AND MECHANICAL COLLEGE

BATON ROUGE · LOUISIANA · 70803

College of Arts and Sciences

DEPARTMENT OF BOTANY

August 7, 1975

Doubleday Anchor Books  
Doubleday & Co., Inc.  
Garden City, New York

*Out of Print*

Gentlemen:

If it is still available, kindly send me a copy of the following  
book: Kissinger, H.A. 1958. Nuclear weapons and foreign policy. (A 152  
in your series of publications)

I would also like to have a complete list of books now available  
from your press.

Sincerely yours,

*B. Lowy*

B. Lowy  
Professor of Botany

*Dale Labs*

July 27, 1976

Dale Laboratories  
Hollywood, Florida 33020

Gentlemen:

I recently returned from Guatemala where a colleague of mine told me about your photographic services and showed me some slides processed in your laboratory. They looked excellent and I am interested in purchasing a few rolls of 35 mm (36X No. 5247 Eastman Color Type) film.

Since I have no price list, I am enclosing my check for \$10. Please send me film in approximately this amount and credit me with any remaining sum. I would also like to have complete information on your processing services pertaining to this type of film.

Sincerely yours,

Bernard Lowy



*The Honorable Woodrow W. Dumas, Mayor-President  
The City-Parish Council of East Baton Rouge  
and  
The Riverside Centroplex Commission  
Request  
The Honor of Your Presence  
at the  
Dedication Ceremonies  
of the  
Riverside Centroplex / Governmental Building  
Friday, November Eleventh, Nineteen Hundred Seventy-seven  
at  
Eleven O'clock in the Morning*

THE UNIVERSITY OF VERMONT  
COLLEGE OF AGRICULTURE AND HOME ECONOMICS  
BURLINGTON, VERMONT

DEPARTMENT OF BOTANY  
~~OFFICE OF THE DEAN~~  
~~MEDICAL BUILDING~~

August 29, 1972

Prof. Bernard Lowy  
Department of Botany  
Louisiana State University  
Baton Rouge, Louisiana 70803

Dear Professor Lowy:

Thanks for your papers which arrived some time ago. I have just found time to read them after a very busy summer. I enjoyed the paper on Mushroom stones in Guatemala. When I taught there in 1941-2, the museum was not well organized and I did not happen to see ant mushroom stones in my frequent trips to small Indian villages. I visited the Museum on my trip in 1960, but did not have timex to see all the exhibits.

This spring and summer I have been sorting, putting into envelopes and identifying the lichens of Guatemala from 1941-2. When I returned I found large collections of Antarctic lichens awaiting study, so I published them first. Then I received a lot of lichens of Tropical Africa from Kew, Kenya, Uganda and Rhodesia. The fifth volume of these was published this spring.

My younger daughter Mary and family spent July with us between the Shaw A.F. base in South Carolina and her husband's new assignment to the base in Albuquerque. We spent the time at our summer home in Pawlet where the four grandchildren had more room to play. Now we are back in Burlington except weekends in Pawlet to mow the lawn and harvest our blueberries, which have been ripening slowly this year.

Sincerely yours  
*Carroll W Dodge*  
Carroll W. Dodge  
Professor

BRASIL TURÍSTICO  
53- RIO DE JANEIRO - GB  
Jardim do Flamengo com Pão de Açúcar ao fundo  
Flamengo Gardens with Sugar Loaf in the background

10/5/73

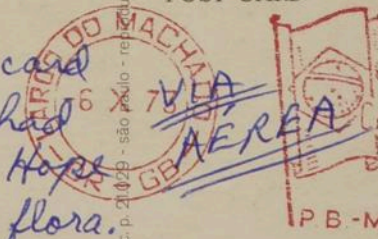
CARTÃO POSTAL  
TARJETA POSTAL  
POST CARD

Dear Bernard:  
Couldn't find a post card  
with mushrooms, so had  
to settle for this one. Hope  
you can identify the flora.

We are doing well and  
enjoying Brazil, but find life  
in a big city more and more  
difficult. Visited Luis Pitombo  
in S. Paulo & he sends regards.

Keep a sharp eye on the  
university and don't let them  
do anything stupid. - Best regards  
to Sara + Denis. - Herman + Marcia Daly

P.S. By the time you retire the Amazon  
may already be a pasture, if not a desert.



Prof. BERNARD Lowy  
DEPT. OF BOTANY  
LOUISIANA STATE UNIVERSITY  
BATON ROUGE, LA. 70803  
E. U. A

THE UNIVERSITY OF VERMONT  
COLLEGE OF AGRICULTURE AND HOME ECONOMICS  
BURLINGTON, VERMONT 05401

DEPARTMENT OF BOTANY

April 8, 1972

Prof. B. Lowy  
Department of Botany  
Louisiana State University  
Baton Rouge, Louisiana 70803

Dear Professor Lowy:

Thanks for the keys to Neotropical Tremellales. Since the literature is so scattered, they will be very helpful when I get to my Costa Rican fungi. I sent all my material of Prof. Martin many years ago. It was mostly Thelephoraceae sensu latiore but probably contained resupinate Tremellales. He never got time to study it and returned it some years ago. Since it came back I have been very busy with lichens and have not gotten time to have it sectioned for study.

We have had a more or less average winter, about 80 inches of snowfall in contrast to 150 inches last winter. It came in 4-6 inch snowfalls, so one fall was cleared away before the next came. It has been good sugar weather for the last three weeks.

Sincerely yours

*Carroll W. Dodge*  
Carroll W. Dodge  
Professor

THE UNIVERSITY OF VERMONT  
COLLEGE OF AGRICULTURE AND HOME ECONOMICS  
BURLINGTON, VERMONT 05401

DEPARTMENT OF BOTANY

March 8, 1972

Prof. B. Lowy  
Botany Department  
Louisian State University  
Baton Rouge, Louisiana 70803

Dear Professor Lowy:

Thanks for your paper on mushroom stones in Guatemala which arrived some time ago. I have just found time to read it with pleasure. During my year and a half in Guatemala, I did not see any, but I carefully avoided the little clearings in the forest where the Indians performed their religious ceremonies. Foreigners were not welcome. The collections in the National Museum were not well organized.

This fall and Winter I have been sorting and putting into envelopes my herbarious case full of Guatemalan lichens, still in the packages in which they were shipped in 1942. When I returned in 1942, I had a heavier teaching schedule and the collections of the Australian Antarctic Expeditions and the U.S. Navy Expeditions. By the time those were studied, I had large collections from tropical Africa, Chile and New Zealand.

We have had a relatively mild winter in constrast to last with its ~~12.5 feet~~ 12.5 feet of snow without thaws. This year we have had 6-8 inches at a time with thaws between. It is almost sugaring time.

Sincerely yours,

*Carroll W. Dodge*  
Carroll W. Dodge  
Professor

THE UNIVERSITY OF VERMONT  
COLLEGE OF AGRICULTURE AND HOME ECONOMICS  
BURLINGTON, VERMONT

DEPARTMENT OF BOTANY  
~~OFFICE OF THE DEAN~~  
~~MEDICAL BUILDING~~

March 11, 1965

Dr. B. Lowy.  
Department of Botany  
Louisiana State University  
Baton Rouge, Louisiana 70803

Dear Doctor Lowy:

I wish to thank you for your papers which arrived yesterday. *Pseudotulasnella* is a very curious genus. If I ever get time to work over my Guatemalan collections, your paper on the Tremellaceae will be helpful. At the moment I do not remember whether I got many Tremellales.

I am still busy with my Antarctic lichens. Last week the weather has been quite spring-like, but we may have more snow yet.

Sincerely yours,

*Carroll W. Dodge*

Carroll W. Dodge  
Professor

THE UNIVERSITY OF VERMONT  
COLLEGE OF AGRICULTURE AND HOME ECONOMICS  
BURLINGTON, VERMONT

DEPARTMENT OF BOTANY  
OFFICE OF THE DEAN  
MEDICAL BUILDING

February 27, 1965

Professor B. Lowy  
Department of Botany  
Louisiana State University  
Baton Rouge, Louisiana

Dear Professor Lowy:

Thanks for the additional specimen of *Collema*.

In reply to your letter of Feb. 11th, I do not know of any fungus *exsiccati* presently offered for sale. Before the Second World War, Weigel of Leipzig handled a large amount of classical fungus *exsiccati*. Since, I know of no one who carries on that work. From time to time, one sees an offer in second hand book catalogues, but not very often.

I am just finishing my accumulated correspondance and have about finished studying the slides prepared by my research assistant while I was away on vacation. I have just unpacked 350 numbers from the vicinity of Cape Hallett, so I shall be busy with them for some time as often there is more than one species on a rock fragment.

With best wishes for a profitable sabbatical year in São Paulo.

Sincerely yours,

*Carroll W. Dodge*  
Carroll W. Dodge  
Professor

THE UNIVERSITY OF VERMONT  
COLLEGE OF AGRICULTURE AND HOME ECONOMICS  
BURLINGTON, VERMONT

DEPARTMENT OF BOTANY  
OFFICE OF THE DEAN  
MEDICAL BUILDING

February 3, 1965

Prof. B. Lowy  
Dept. of Botany  
Louisiana State University  
Baton Rouge, Louisiana

Dear Professor Lowy:

I have identified the lichen you enclosed with your Christmas card as *Collema lamuense* Dodge, the only specimen I have seen beside the type, both from coastal plain of Kenya.

Owing to a number of delays I only returned from Hawaii last Wednesday afternoon, and have been busy going over mail ever since.

Sincerely yours,

*Carroll W Dodge*  
Carroll W. Dodge  
Professor

Burlington, Vermont  
December, 1972

Dear friends:

Another quiet but busy year. After studying most of my Costa Rican lichens, as well as the Panamanian, I began to unpack, label and study my Guatemalan collections. When I returned from there in 1962, I had a very heavy teaching schedule, also two very large collections from Antarctica and subantarctic islands to study. When these were about finished, I received tropical and South African lichens from correspondents in Sierra Leone, Nigeria, São Thomé, Angola, as well as all the unidentified lichens of tropical and South Africa from Kew. The last volume (5) of these was published last winter.

Then I revised the lichen herbarium of Canterbury University, Christchurch, New Zealand, very rich in specimens from subantarctic islands south of New Zealand, as well as alpine areas of the South Island.

Père LeGallo, who retired last year, had sent me over 4000 specimens for study from the French Antilles and French Guiana. With these studied and inserted in my herbarium, I have a very good representation of the whole Caribbean area. The Guatemalan lichens, now about three-fourths processed, include many Mexican species I had not seen before.

I have long been preparing a monograph of the Stictaceae of the Western Hemisphere north of Argentina and Chile and including Europe, since many North American species are also found in Europe. Free to undertake this again, I borrowed, this past spring, the Stictaceae of the Farlow Herbarium as well as those in the private herbarium of Dr. Klement in Germany. These have yielded many, new distributions and better concepts of variation.

During July, we had visits from our four VanSitters grandchildren and their parents. Anne, Dale and Caroline came later in their Winnebago, when they cleared out the last of their furniture from their finally sold St. Allans house. As our grandchildren range in age from 8 to 16, we find their visits interesting and enjoyable.

Finally, I have just now finished shortening the manuscript of my lichen flora of the Antarctic and Adjacent Islands by summarizing geographic distribution, eliminating complete citations with collectors' names and numbers. It will be a relief when this is finally off the press since I have been working at it for nearly forty years.

Best wishes to you all for a happy holiday season. *Carroll W Sodge*

312 Maple Street  
Burlington, Vermont 05401  
November, 1971

Dear friends:

Again we greet you, this time after a year with more than usual worries. We started out with happy plans for a late winter visit to Puerto Rico. All had to be changed, though, when Carroll went to the hospital for a 12 days' stay and came home to a period of convalescence that took us into spring, thus effectually cancelling all travel plans.

Meanwhile I, as president of the League of Vermont Writers, was keeping so busy that I doubt if any trip would have been wise. There was a League meeting in early May for which the burden of arrangements and speakers fell on my shoulders even though I had thought to escape such through a program committee. Even before that May meeting was well under way, I was involved with elaborate plans for the League's traditional two day summer institute. September saw another two day meeting which ended happily for me with the election of a new president. Only those who have undertaken such tasks and seen them through can appreciate the multitude of detail that inevitably, in a loosely organized group like ours, falls upon the president.

During that same period, Carroll and I had distracting personal worries - not only his health which was soon on the upgrade, but Anne's and Dale's mounting problems in St. Albans and Mary's, healthwise, in New Mexico. Anne and Dale finally reached the inevitable conclusion that St. Albans, medically, was not for them and are now connected with a Kentucky hospital (they live across the state line in W. Virginia) - she pathologist there, he in general surgery. Mary's middle boy, Gregg, had a year of serious health problems and, though better now, has to be careful. Mary had a cataract operation in one eye. Darrell was in Thailand, flying presumably dangerous missions. Every time the phone rang, we had sinking feelings.

Last summer, while Mary was recovering from her eye operation, we had her children here - all four - with Anne's three added for a week. A lively time it was, even with Mary's four in a Y camp for two weeks on a Lake Champlain island. Now Darrell is back, Gregg better, Mary's eye recovered (though yet to be properly fitted with a contact lens) and Anne, Dale & family settled in W. Virginia, also with the League now someone else's responsibility, our worries are reduced to small items like whether, whither, when we'll take off this winter. Oh, yes, also what I shall write and whether anyone might care to read it.

The season's best to all of you. - - - - - Bertha Dodge

A snowy Thanksgiving day reminds it is time to send our greetings if our friends are to receive them for Christmas. Research went slowly for me the first half of the year. After I got home from the hospital, it was three months before I felt like working all day in the laboratory. I managed to study for correspondents several lots of lichens from Chile and a fairly large collection from Campbell Island, south of New Zealand; also some from New Guinea, the Philippines and North Borneo which I had had on hand a long time. After the grandchildren left, we visited libraries in Dartmouth College and Syracuse University to consult documents relating to John Ledyard (Corporal of Marines on Cook's last voyage) for an article Bertha wrote for History Today. Later this fall we spent several days at the Whaling Museum in New Bedford - another project of Bertha's. This fall I've been working on fungi and lichens from Guatemala (1941-42) previously put aside for Antarctic studies.

Wishing all a merry Christmas and happy New Year.

Carroll Dodge

December, 1970

312 Maple Street, Burlington, Vt.

Dear friends:

With another busy year nearly gone, it's time to compose Christmas greetings. The night after last Christmas began a three foot snowfall which covered streets and sidewalks for many days. By walking in the streets, which were cleared first, and climbing through snowdrifts, I managed not to miss more than one day's work at the University.

As usual we took our long vacation in March and April - a week at the Huntington Library near Pasadena, two weekends with Bertha's sister in Santa Barbara, California, then to El Paso, where Mary met us. She drove us to Las Cruces, New Mexico, where she is a graduate student in music at the State University. After leaving Mary, we went to Albuquerque, hired a car and made a trip of over 1300 miles through Gallup, the Painted Desert, Flagstaff to the south rim of the Grand Canyon, which Bertha had never seen. I could see many changes there since I visited it in 1921. Returning, we saw the canyon of the Little Colorado, drove through the Navajo Indian Reservation to the ruins in Chaco Canyon and the forests of northern New Mexico to Santa Fe and back to Albuquerque, whence we flew home to arrive here with our crocuses in bloom.

While I was away, the University decided to move my office and herbarium to a building across the street. A department secretary took charge of the packing, so that only part of the moving remained for me to supervise. That way, though, unpacking took longer than it would have had I done the packing.

During the summer, we divided our time between here and Pawlet, as I had two student assistants preparing microscopic sections. These enabled me to identify and put away a collection of lichens from New Guinea, another from the French Antilles and some of my own Central American collections.

This autumn I have been revising a manuscript I have had on hand for over thirty years. I have also been studying small collections from central Chile and southeast New Zealand. I now am awaiting small collections from Antarctica as far as 86°30'S, as well as from the deserts of northeastern Kenya.

With best wishes for a Merry Christmas and a Happy New Year.

*Carroll W Dodge*

December 1973

Dear Friends:

This greeting will be brief and late, without the usual Christmas card, since to judge by what is available, Christmas cards seem to be going out. Our lateness is due to the fact that only a week ago, we returned from a month's visit to our daughter Mary and family in Albuquerque, New Mexico and our briefness due to the fact that this year much of our news has been sad.

In February, Carroll went to the hospital for an operation and stayed there over a month, followed by a long convalescence. In August, his sister Ruth began to fail (inoperable cancer) and died Sept. 25th. We had postponed our visit to Mary from February (we had bought our tickets just before Carroll went to the hospital), then because of Ruth's death from September. Finally we reached Albuquerque on Oct. 19th, expecting to visit Bertha's sister, Constance, working in Los Alamos, on the 21st. She died suddenly (pulmonary embolism) on the 20th so that our visit to Los Alamos was for the sad occasion of her funeral. It is hard to believe she is gone, still harder to work up sentiments for a Merry Christmas, so we hope you will bear with us.

For personal news, Bertha has been working on a variety of manuscripts, with some shorter ones published and another book or so hopefully on the way. More important has been the publication of Carroll's work on Antarctic lichens, 38 years of research. More orders have come from abroad, everywhere from Tasmania to Finland, than from the United States. He has also been working on a Flora Liguénica de Chile to be published in Santiago. We are still working, hoping the New Year will not be so grim as to prevent us from traveling a little more and possibly seeing old friends again. However, we are always ready to welcome our friends here and find such visits a source of real pleasure.

May you have a happy and prosperous 1974!

*Carroll W Dodge*

CURRICULUM VITAE  
of  
HERMAN EDWARD DALY

PERSONAL

Citizenship: U.S.A.  
Date and Place of Birth: July 21, 1938, Houston, Texas  
Martial Status: Married, two children.  
Present Occupation: Professor of Economics, Louisiana State University, Baton Rouge, Louisiana 70803.  
Major Interests: Academic fields, economic development, population, environmental economics, resource management, comparative economic systems.  
Regional interest, Latin America.

EDUCATION AND EXPERIENCE

High School: Lamar High School (Houston), graduated cum laude, 1956.  
University: Rice University (Houston), B.A., Economics, cum laude, 1960. (Augmented Academic Program)  
Graduate: Rice University, 1960-61. Vanderbilt University (Nashville, Tennessee), 1961-62, Ph.D. awarded January, 1967.  
University Positions: Vanderbilt (instructor), spring and summer, 1964. Louisiana State University (assistant professor), academic year 1964-65, summer, 1965, academic year 1965-66, fall semester, 1966-67. Assistant Director of Economic Education Workshop at L.S.U. summer, 1966. Ford Foundation Visiting Professor of Economics at the University of Ceara, Brazil, 1967-68. Louisiana State University (associate professor) 1968-69. Vanderbilt (visiting associate professor, Graduate Program in Economic Development) summer, 1969. Research Associate, Economic Growth Center, Yale University, 1969-70. Louisiana State University (associate Professor), 1970-71, 1971-72, (professor) 1973.  
Courses Taught: Principles of Economics; International Trade and Finance; Intermediate Economic Theory (micro and macro); Economic Development; Comparative Economic Systems and Marxist Economics; Economics of Population and Environment.  
Business Experience: Tennessee Gas Transmission, Budget Department, summer, 1961 (Houston); American Hardware Company (family business), summers, 1954-60, (Houston).  
Foreign Experience: Western Europe, summer, 1957, as participant in World Council of Churches Voluntary Service Work Camp (near Torino, Italy). Also visited most other countries of Western Europe. Mexico, summer, 1959, to attend courses at the National University of Mexico, summer 1971 to give course on cost of economic growth at CIDOC in Cuernavaca. Uruguay, 1963, seven months'

residence for dissertation research. Brazil, February, 1967-September, 1968, Ford Foundation Visiting Professor of Economics at the University of Ceará (half teaching-half research and administration), Fall 1973, Consultant to Ford Foundation, Rio de Janeiro. Honduras, short course in economics (in Spanish) for Escuela Bancaria Superior Centroamericana, Summers 1970, 1971, 1972.

Foreign Languages: Speak well: Portuguese  
Speak competently: Spanish  
Limited knowledge: French

PUBLICATIONS

Books:

Toward a Steady-State Economy, Editor, W.H. Freeman and Co., San Francisco, 1973. (used during 1973-74 in courses at more than 80 universities)

Articles:

"The Uruguayan Economy: Its Basic Nature and Current Problems," Journal of Inter-American Studies, July, 1965.

"An Historical Question and Three Hypotheses Concerning the Uruguayan Economy," Inter-American Economic Affairs, Summer, 1966.

"A Brief Analysis of Recent Uruguayan Trade Control Systems," Economic Development and Cultural Change, April, 1967.

"Triple Revolution, Marginal Productivity, and Price Socialism" Co-existence, (University of Glasgow) January, 1967.

"A Note on the Pathological Growth of the Uruguayan Banking Sector," Economic Development and Cultural Change, Vol. 16, No. 1, 1967.

"Equivalent Multiple Exchange Rates and Trade Control: A Theoretical Viewpoint and a Planning Model," Revista Brasileira de Economia, September, 1967. (In Portuguese). Followed in next issue by comment from Charles P. Kindleberger.

"On Economics as a Life Science," Journal of Political Economy, June, 1968.

"Economic Development and the Population Question in Northeast Brazil," Revista Brasileira de Economia, (in Portuguese) Dec., 1968.

"The Population Question in Northeast Brazil: Its Economic and Ideological Dimensions: Economic Development and Cultural Change, July, 1970. Reprinted by Yale Economic Growth Center, Center Papers. Reprinted in Spanish in Demografia y Economia No. 9 (Mexico City).

"Some Observations on the Causes and Consequences of the Shortage of Change in Northeast Brazil," Journal of Political Economy, Jan., 1970.

"Marxian-Malthusian Foundations of Economic-Demographic Policy: A General Suggestion with Specific Remarks on its Relevance to Latin America" invited paper to be published in the proceedings of the International Union for the Scientific Study of Population, Regional Conference, Mexico City, August 1970.

"Towards a Stationary-State Economy" in Patient Earth, J. Harte and R. Socolow, eds. Holt, Rinehart and Winston, 1971. Reprinted in anticipation of publication by Yale Alumni Magazine, May 1970. Reprinted ZPG National Reporter, March 1971. Reprinted in Readings in Human Population Ecology, Wayne H. Davis, ed. Prentice-Hall 1972. Reprinted in Economic Growth vs the Environment, W. Johnson and J. Hardesty, eds., Wadsworth, 1971. Reprinted in Japanese in Keizaigaku Kyoshitu, Tokyo, November 1975.

"Trends in Economic Interpretations in Latin America: The Shifting Balance Among Neo-Classical, Neo-Marxist, and Neo-Malthusian Views" Annals of the Southeastern Conference on Latin American Studies, March, 1971.

"A Marxian-Malthusian View of Poverty and Development," Population Studies, (London School of Economics) March, 1971. Reprinted by Yale University Economic Growth Center, Center Papers. Reprinted in Portuguese translation in Vale do Rio dos Sinos, Area Economica, Ano 1973, No. 8, pp. 51-70.

"The Canary Has Fallen Silent," New York Times, Oct. 14, 1970, p. 43. Reprinted in National Parks and Conservation Magazine, June 1971.

"The Stationary-State Economy: Toward a Political Economy of Biophysical Equilibrium and Moral Growth," University of Alabama, Distinguished Visiting Lecture Series, No. 2, Sept. 1971. Reprinted in ZPG National Reporter, Sept. 1971; reprinted in The Ecologist (London) June 1972; reprinted in Environment and Future (Sweden, "Miljö Och Framtid"), 1973.

"The Political Economy of Population in Brazilian Economic Development" H. Jon Rosenbaum and William Tyler, eds. Contemporary Brazil: Issues in Economic and Political Development, Frederick A. Praeger, New York, 1972.

"Electric Power, Employment, and Economic Growth" invited paper AAAS Symposium on Energy Crisis, 1971. Published in Congressional Record, Feb. 8, 1972 at the request of Sen. Phillip Hart. Reprinted in Energy and Human Welfare: A Critical Analysis, edited by Barry Commoner, Howard Boksenbaum and Michael Corr, Macmillan Information, Riverside, New Jersey, 1974.

"In Defense of the Steady-State Economy" American Journal of Agricultural Economics, December, 1972.

"Institutions Necessary for a Steady-State Economy: Three Suggestions," IDOC, September, 1972, and German translation reprinted in Umwelt (Swiss environmental journal). Reprinted for distribution abroad by United States Information service. Reprinted in The Ecologist, March, 1973.

"Long Run Environmental Constraints and Trade-Offs Between Human and Artifact Populations" International Population Conference, International Union for the Scientific Study of Population, Liege, 1973, Vol. III, pp. 453-60.

"A Model for a Steady-State Economy," in Growth and It's Implications for the Future, Part I, pp. 435-357, Hearings with Appendix, before the Subcommittee on Fisheries and Wildlife Conservation and the Environment of the Committee on Merchant Marine and Fisheries, House of Representatives, 93rd Congress, First Session, May 1, 1973. Reprinted in The Forensic Quarterly, August 1975.

"Steady-State Economics vs. Growthmania: A Critique of the Orthodox Conceptions of Growth, Wants, Scarcity, and Efficiency", Policy Sciences, Fall, 1974. Reprinted in P.C. Liou and R.O. Clarke, eds., Environmental Spectrum, D. Van Nostrand, 1974. Reprinted in Japanese in Keizai-Seminar, August, 1975.

"The Economics of the Steady-State", American Economic Review, Papers and Proceedings of December 1973 Conference, March, 1974. Reprinted in Spanish in Demografia y Economia, Vol. VIII, No. 3, Mexico City. Reprinted in Japanese in Keizaigaku Kyoshitu, Tokyo, November 1975.

Testimony, hearings before the U.S. Senate Subcommittee on Air and Water Pollution, The Impact of Growth on the Environment, April 2, and 3, 1973, U.S. Government Printing Office, Washington, D.C., Serial No. 93-H8, pp. 2-18.

Book review of Blueprint for Survival, by Edward Goldsmith, et. al., in American Scientist Nov./Dec. 1973, pp. 755-56.

Book Review of Traces on the Rhodian Shore in History of Political Economy (forthcoming)

Letter, Science 8 August 1975, p. 411, (Vol. 189, No. 4201)

Testimony, U.S. House Subcommittee on the Environment of the Committee on Interior and Insular Affairs, Hearings on National Energy Conservation Policy Act of 1974 (H.R. 11343), U.S. Government Printing Office, Serial No. 93-95, Washington, 1974.

"Reply to Yony Sampaio," Economic Development and Cultural Change, (forthcoming).

"Energy Demand Forecasting" Journal of American Institute of Planners, (forthcoming December, 1975).

"The Developing Economies and the Steady-State", The Developing Economies, (forthcoming April, 1976) Tokyo, Japan.

✓ "Three Views of Current Brazilian Economic Development", Revista Interamericana Review (forthcoming)

"The Steady-State Economy in Outline," guest editorial in G. Tyler Miller, Living in the Environment: Concepts, Problems, and Alternatives, Wadsworth Publishing Co., Belmont Ca., 197~~7~~<sup>5</sup>, p. 329.

"The Steady-State Economy: What, Why, and How", in Dennis Pirages, editor, Proceedings of Conference at University of California, San Diego, sponsored by Institute of Science Technology and Public Affairs, Oct. 1974, (forthcoming).

"On Limiting Economic Growth", Invited Testimony before the Joint Economic Committee of the U.S. Congress, to be published in Congressional Record (Hearings of October 23, 1975).

Consulting

Activities: Reader for Selection Committee on Ford-Rockefeller Foundations Program for Social Science Grants in Population, 1971, 1972, 1973, 1974.

National Board of Advisors, Environmental Action.

Member, Committee on Mineral Resources and Environment (National Academy of Sciences), 1973-76.

Consultant to AAAS Committee on Environmental Alternations, Electric Power Study Group, 1971.

Consultant, Ford Foundation Energy Policy Project, 1973.

National Board of Directors of ZPG, 1972, 1975.

Consultant to Ford Foundation, Rio de Janeiro, 1973.

National Board of Directors of Center for Growth Alternatives.

Board of Advisors of Ecology Center of Louisiana 1974.

Board of Advisors, Institute for Liberty and Community, 1975.

National Board of Advisors, Negative Population Growth

Consultant, Edison Electric Institute, Study on Growth

LECTURES, SCIENTIFIC CONFERENCES, ETC.:

Invited Lecture: Department of Economics, University of North Carolina.  
"Population Problems in Brazil" February 1970.

Invited Lectures while visiting at Yale University--1969-1970:

1. Yale Women's Society
2. Yale Forestry School
3. Yale Economic Growth Center, two seminars.
4. Yale chapter of ZPG

Invited Paper: International Union for the Scientific Study of Population, Latin America Regional Conference, Mexico City, August, 1970.

Invited Lecture: Population Council, New York City. Seminar for staff and associates on steady-state economy. March 1971.

Invited Lecture: University of Minnesota, environmental seminar, School of Engineering. "Steady-State Economy". November, 1971.

Invited Lecture: Stanford University, Environmental Seminar, Biology, Department. "Depletion Quotas vs. Effluent Taxes" Feb. 1972.

Invited Lecture: University of North Carolina, Population Center. "Controlling the Population of Artifacts: Depletion Quotas vs. Effluent Taxes" April 1972.

Invited Participant: Conference on "Alternatives in Education" Center for Study of Democratic Institutions Santa Barbara, California--March 1970.

Invited Participant: Shell Oil Faculty Forum, LSU's representative, Houston, December, 1971.

Invited Lecture: Conference at Claremont School of Theology "Alternatives to Catastrophe" May 3-5, 1972.

Lecture Series: Centro Intercultural de Documentacion--Cuernavaca, Mexico--Summer, 1971.

Invited Paper: Latin American Studies Association, National Conference, Austin, Texas 1971 (December). "Political Economy of Population in Brazilian Development".

Invited Paper: "In Defense of the Steady-State Economy" American Agricultural Economics Association Annual Meeting. Gainesville, Florida, August 1972.

Invited Seminar: "Toward Steady-State Earth" Environmental Engineering Session of ASCE in Houston October 1972.

Invited Lecture: California Institute of Technology, Environmental Quality Laboratory. Subject: environmental economics. May, 1972.

Invited Paper: 3-day conference "Scarcity and Growth: Toward a National Materials Policy" University of Minnesota. Sponsored by the President's National Commission on Materials Policy. June, 1972.

Invited Participant: Environmental Forum, Stockholm, Sweden, June 4-17, 1972.

Invited Seminar: University of Uppsala (Sweden), Energy and Economic Growth" given jointly with D. E. Abrahamson, June 1972.

Invited Lecture: Yale University, School of Forestry, Lecture Series on "Limits to Growth: the Equilibrium State and Human Society" October, 1972.

Invited Chairman: Session II of General Symposium on the question "Must we Limit Economic Growth" at the National Convention of the American Association for the Advancement of Science, December, 1972, Washington, D.C.

Invited Lecture: Fundação Getulio Vargas, Rio de Janeiro, "Desenvolvimento e o Problema Demografico no Nordeste Brasileiro," May 1968.

Invited Seminar: University of Minnesota, Department of Agricultural and Applied Economics, June 1972, "Are Resource Prices too Low?"

Invited Lecture: "Limits to Growth", National Association of Manufacturers; New Orleans, November, 1972.

Invited Speaker: Atlanta Environmental Symposium, Agnes Scott College, February 13-51, 1973.

Public Lecture: Middlebury College, Vermont, April 11, 1973, "The Steady-State Economy".

Public Lecture: Dartmouth College, "The Steady-State Economy," April 12, 1973.

Invited Seminar: M.I.T., Sloan School of Management, April 14, on steady-state economy.

Invited Testimony: United States Senate, Subcommittee on Air and Water Pollution, Hearings on the Impact of Growth on the Environment, April 2, 1973.

Invited Speaker: Oregon State University, Symposium on Limits to Growth, May 10, 1973.

Invited Lecture: Universidade Federal do Rio de Janeiro, Faculdade de Geografia, "Limites ao Crescimento Economico" October, 1973.

Invited Seminar: Shell Oil Co., Houston, Texas, "Steady-State Economy", January 1974.

Invited Participant, "Seminario Brasileiro de População", Porto Alegre, Brazil, July, 1973.

Invited Lecture: Duke University, March 1974.

Invited Lecture: University of North Carolina, Chapel Hill, March 1974.

Invited Lecture: University of North Carolina, Greensboro, March 1974.

Invited Seminar "The Economics of the Steady-State", The International Federation of Institutes of Advanced Study, Board of Directors Meeting, Aspen, Colorado, October 1974.

Invited Seminar, "Transition to a Steady-State Economy" University of California, San Diego, Institute of Science, Technology, and Public Affairs, October 1974.

Invited Panelist, "Limits to Growth Panel" Society of Actuaries, National Convention, New Orleans, October 1974.

Invited Paper, "Developing Economies and the Steady State," Conference on "Asian Economics in Perspective" at the Institute of Developing Economies, Tokyo, Japan, February 1975.

Invited Speaker, "Economics for the Future," at Survival Symposium, University of North Carolina, March 1975.

Invited lecture, "Obstacles to Clear Thinking About a Steady-State Economy" Cornell University, Department of Agricultural Economics, June 1975.

Invited lecture, "The Ethics, Ecology, Efficiency, and Economy of the Steady-State" University of Alberta, Edmonton, Alberta, Canada, Sept. 1975.

Invited Panelist, Connecticut Bar Assn., Oct. 23, 1975.

Invited paper, Limits to Growth Conference, Houston, Oct. 21, 1975.

Invited Panelist, Southern Economic Association, New Orleans, Nov. 1975.

Invited testimony, Joint Economic Committee of U.S. Congress, Hearings on Long-term economic growth, October 23, 1975.

Invited short course, "Ecology and Economics" Universidade do Vale do Rio dos Sinos, Rio Grande do Sul, Brazil, January, 1976.

demand is likely to be for this type of chromosomal analysis. Prenatal diagnosis of a metabolic disorder is, for now, a more sophisticated matter. Fetal cells are cultured for about 4 weeks and then examined for the presence or absence of whatever enzyme is involved in the disease for which a woman is being screened. These genetic disorders, known as inborn errors of metabolism, are comparatively rare and are not something for which one would screen a large population. Cooper predicts that "existing research laboratories would, for the near future at least, continue to provide the facilities for biochemical analyses."

Even though amniocentesis seems to be on the verge of coming into its own as a medical procedure—some insurance programs cover its cost which usually is not more than \$250—it is certainly not the final answer to prenatal diagnosis. It cannot be performed safely until the 13th week of pregnancy. Depending upon what disorder one is looking for, it can take between 2 and 6 weeks to grow fetal cells in culture and analyze them appropriately. Therefore, if, on the basis of test results, a woman does elect an abortion, it will have to be performed later in pregnancy than one would wish.

Furthermore, there are many, many ge-

netic disorders—some of them relatively common—that cannot as yet be diagnosed in utero. Prenatal diagnosis of sickle cell anemia and of Cooley's anemia has been reported just recently, and only in a handful of cases. In utero detection of cystic fibrosis remains to be perfected.

And finally, there is the matter of what science can offer a family if the fetus is found to be genetically defective in some life-threatening way. As Cooper noted at the conclusion of his address, "a preventive technique dependent on elective abortion is not a final answer to the problem of birth defects."

—BARBARA J. CULLITON

## Limits to Growth: Texas Conference Finds None, but Didn't Look Too Hard

*The Woodlands, Texas.* Houston is a city in boom, sucking in new settlers at the rate of a thousand a week. Twenty-five miles north of the city, a new town called The Woodlands is designed to be home to 150,000 citizens come the year 1990. The town is the brainchild of a millionaire geologist named George P. Mitchell who made his money by sinking oil wells in the right places and who is father to ten children.

A conference on the theme of "Limits to Growth" was held on 19 to 21 October at The Woodlands under Mitchell's sponsorship. It could not have had a more paradoxical venue or benefactor. Yet, as it happened, little came out of the conference likely to give offense to Mitchell, or the burghers of Houston, or the boards of *Fortune's* 500, many of whom had sent delegates at Mitchell's personal invitation.

Limits to growth, as every stripling knows, is the name of the computer game which predicts that industrial economies will collapse within a hundred years, unless someone does something, because of raw materials shortages and poisoning from pollution. The exercise was performed for the shadowy Club of Rome by a team under Dennis L. Meadows, a management expert at Dartmouth College. A preliminary report, titled *Limits to Growth* and written by biophysicist Donella H. Meadows, was issued 3 years ago in a blaze of publicity (*Science*, 10 March 1972) that obscured its more serious aspects.

The howls of "Foul!" emanating from the general direction of economics departments soon made clear that the report had

struck home somewhere. What had jarred the professors of a subject which is almost synonymous with growth was the use of their own stock-in-trade (computer simulation and the assumption of exponential growth) to arrive at the antithesis of the profession's most hallowed premise.

The scatological eschatology of death by waste in a century need not perhaps be taken too solemnly. But the general theme which *Limits to Growth* seeks to illustrate, that exponential growth in a finite world may not be indefinitely possible, is at least intuitively plausible. It has served as a rallying point for many current angsts, such as conservation, concern about materialist values, and zero population growth. If this potpourri of presentiments somehow lacks the tang of final proof, so too does the conventional counterargument or faith, that technology will find fixes that allow everything to go on as usual.

The chance for a public debate on the issue arose when oilman Mitchell read *Limits to Growth* 2 years ago and allegedly declared to an aide, "Dammit, we ought to do something about this." After conversations with Meadows, Mitchell decided to sponsor five conferences on the theme, of which last month's was the first, the others to follow at 2-year intervals. Mitchell also took up an idea of Meadows to award prizes for essays on the consequences of declining economic growth. He gave away \$20,000 in prizes last month (the \$10,000 first prize went to Bruce M. Hannon, a computer specialist at the University of Illinois) and plans to distribute \$50,000 the

next time around. Mitchell also put up the initial money for the conference, most of which will be recovered since the conference is expected to break even or make a small profit.

Since Mitchell's generosity is likely to be an important factor over the next 10 years in public debate about growth, it is worth noting a few facts about him. He has drilled more than 3000 oil and gas wells in the United States, about half of them producers, and 600 in "wildcat" or unproven areas. Ten years ago his company, Mitchell Energy and Development Corporation, began to diversify by buying up 20,000 acres north of Houston on which to build a new town. Mitchell has already invested \$90 million on the project and earlier this year, faced with a disastrous real estate market and canceled federal grants, he transferred another \$10 million from his profitable energy business. He now expects The Woodlands to be making "a good profit within 3 to 4 years."

Mitchell's interest in the limits to growth issue seems to consist chiefly of a general belief that there are problems which he would like to see discussed, particularly among the business community. He gave the organizers a free hand in arranging the conference program and deciding on speakers. He invited the University of Houston to join his company and the Club of Rome as sponsors of the conference. Mitchell has close connections with the university, having donated 400 acres at The Woodlands as the site for a new campus. The Texas state legislature will decide next year whether to vote funds for the campus. Asked if holding the Limits to Growth conference at The Woodlands might give incidental help toward a favorable decision, Mitchell said, "Anything like this helps the project and helps to broaden the horizons of the University of Houston, which is why they were interested in the conference, but that was not its

thrust. The legislature will decide on the basis of the fact that the project is in a growth area of the state." A university spokesman said in answer to the same question, "It certainly can't hurt. Whether it would have any effect on the legislature I don't know, but it could not but help make an impression of some kind."

The conference program was put together chiefly by Dennis Meadows and John Naisbitt, a professional conference organizer at the Center for Policy Process in Washington, D.C. Overall, the conference was a success. It brought together some interestingly diverse speakers and exposed a large audience, drawn about equally from universities, business and government, to a wide range of ideas in favor of and against the limits to growth theme.

Yet in academic terms, if that is a fair yardstick, it had little to offer. Few speakers said anything which they or others had not said before. No new ground was broken, no basic premises examined, no areas of agreement or disagreement delineated. Speakers were paid fees, and the overcrowded structure of the conference encouraged star performances rather than a dialogue among participants.

Maybe because of the pressure to perform, at least two of the stars found themselves being publicly accused of frivolity. Herman Kahn of the Hudson Institute was visibly shaken to be told at the end of his address that he had entertained his audience without providing anything of substance. The charge was neither wholly true nor wholly unmerited. Another speaker, economic columnist Elliott Janeway, was described as a "stand-up comedian," an undeserved bouquet since his rant about foreign oil-producer "nuts" lacked wit as well as relevance.

Among the sea of whites at The Woodlands conference were two blacks, one of them the local cop. That was probably a tactical error, at the least, because anti-growth arguments are vulnerable to portrayal as the rationalizations of elitists seeking to preserve their own upper middle class privileges. Any serious debate has to include the poor, both at home and abroad, because they are the first victims of any pause in growth. The price of attending the conference, about \$450 a head plus travel costs, excluded the former, and no representatives of the latter were invited unless two delegates from Iran count as such.

Probably the most substantive address at the conference was given by Herman E. Daly of Louisiana State University, editor of *Toward a Steady State Economy*. Our present economic system, Daly said, aims to maximize the throughput of goods and materials whereas, if we wanted a stationary state, we would aim to minimize it.

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One way of economizing on the use of scarce materials would be for the government to set up a system of auctionable depletion quotas for each such commodity. Having purchased its "right-to-buy" quota, a firm would then go to the marketplace as usual. The quota payment would drive up the net price of the material, reducing both its use and the amount of pollution contingent thereon. For nonrenewable resources, the quota price should be set so as to give a net price at least as high as that of the nearest renewable-source substitute.

In Daly's stationary state economy, the quota prices would capture the scarcity value of the resources in question, and the revenue would be used to finance another necessary institution of the steady state, a distributive system designed to limit the range of inequality in incomes. Daly suggests that the minimum family income might be set at \$7,000, say, and the maximum at \$70,000, beyond which there are diminishing returns anyway.

Population control is another necessary condition of a stationary state, to which end Daly proposes the transferable birth certificate, "an orphan brainchild of Kenneth Boulding's which I am willing to adopt." The mechanism of salable certificates would probably work well, if adopted democratically, but people are not yet ready to accept the idea, Daly believes.

The range of income in Herman Daly's stationary state neatly brackets the average income in Herman Kahn's ever expanding economy. The world at present is home to 4 billion people with an average annual income of \$1,250. In 200 years, Kahn foresees, it will house 15 billion people with an average income of \$20,000. "Two hundred years from now, mankind is going to be almost everywhere in control of the forces of nature, and almost everywhere rich."

In this Kahn-do world, needless to say, "It will always be possible, through substitutes, redesign, or the adoption of alternative processes, to continue economic activities." Internal evidence suggests that Kahn's prepared paper was originally composed as an upbeat celebration of the bicentennial, which might explain why the fears of the anti-growthers are dismissed as "largely illusionary or susceptible to relatively accessible solutions." The serene confidence of this position was somewhat blemished by Kahn's afterthought that, just in case of widespread calamity on earth, "a concerted international effort to create extra-terrestrial self-sustaining life platforms would probably be warranted."

The basic premises of *Limits to Growth* were not reexamined at the conference, but a strange recension on the theme was

offered by Rome-Clubber Jay W. Forrester of MIT. Forrester's computer simulations laid the basis for those conducted by the Meadows team. He now believes that debate about the physical limits to growth is counterproductive, in part because it "invites the rejoinder that technology can circumvent such limits." The dangers of social limits may be a better card for anti-growthers to play, because "rising population density and use of resources is surely at the root of many social stresses." *Limits to Growth* treated the world as a single oyster, but Forrester has discovered that since "only nations have effective political processes," the problems of growth must be solved on a national basis.

Among the more practical offerings at the conference was that by John Todd of the New Alchemy Institute at Woods Hole, Massachusetts (*Science*, 28 February 1975). Todd believes that living systems, powered by sun and wind, will come to replace today's hardware and fuel-consuming systems, and will transform society in doing so. It was perhaps an omission that no one at the conference tried to specify the conditions under which conceptions like Todd's will be relevant.

For those who hadn't spotted the silver lining, Iranian ambassador-at-large Jahangir Amuzegar rehearsed the beneficial effects of the rise in oil prices—the encouragement of energy conservation, industrial efficiency, and environmental sanity. Amuzegar castigated the "needlessly wasteful lifestyles" of the affluent industrial world but said, in effect, that growth was great as long as the Third World could share in it.

Iran's view of growth was put in even more graphic terms by Firuz Vakil, head of the government's planning bureau. In Teheran, he said, people who can now afford to own a car "get more of a kick sitting in a traffic jam than in having clean air. Those countries who have achieved a certain standard of living must take the lead in preserving the environment and such concerns, because others are very busy improving their children's teeth. There is a fallacy in the conception that developing countries can avoid the mistakes of the developed countries, because in a world in which they have to do things quickly, quality suffers."

This down-to-earth note was one that was struck perhaps too seldom. *Limits to Growth '75* made a good beginning, but its successor should probably give more time to hard analysis of stationary state economics, and less to the mushy visions of semiprofessional futurologists, if the Mitchell conferences are to become a forum for serious discussion.

—NICHOLAS WADE

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Oct. 28, 1977

Prof. Bernard Lowy  
Dept. of Botany  
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Baton Rouge, Louisiana 70803

Dear Professor Lowy:

I wish to thank you for the next number of your fascinating story on hallucinogenic mushrooms. When I was there in 1941-2 I did not succeed in making the acquaintance of a bilingual Guatemalan to gain information on their folklore and religion. Mrs. Dodge was collecting Indian textiles and we talked with a Spanish speaking Indian woman in San Pedro de San Marcos, who told us about their courting and marriage customs, as her daughter was engaged and soon to be married.

I suspect any use of hallucinogens would be confined to men and postpubertal boys when they go their shrines in the forest for religious (and phallic ?) ceremonies.

Sincerely yours,

*Carroll W Dodge*

Carroll W. Dodge  
Professor

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