

JOURNAL OF

ISSN 0022-0892

Environmental Health

Dedicated to the advancement of the environmental health professional

July/August 1994

Volume 57, No. 1



LEARNING

FROM

EACH

OTHER

**The NEHA/IEHD
Sabbatical Exchange Program**

Initiated and funded by NSF International, NEHA and the Institution of Environmental Health Officers (IEHO) in England agreed to participate in a unique sabbatical exchange program in 1990. The program offers an enriching experience to a member of both organizations each year. Now in its fourth year, the program has already established a tradition focusing on the exchange of ideas, solutions, and methods. Through the participants, the scope of environmental health issues and practices worldwide is broadening.

Upon selection, the sabbatical recipients set out on a four-week journey of enlightening experiences and come into contact with virtually every aspect of environmental health problems and solutions confronted by the other country. The sabbatical exchange presents the opportunity to look at one's own approaches and compare—sometimes for the better and sometimes not.

Gary Coleman, NEHA's 1992-93 NEHA/IEHO Sabbatical Exchange Program recipient, shares in this first of a two part report his experiences and his impressions of the United States and United Kingdom's environmental health programs. The Journal hopes you will find in his story ideas you might use as well as a deeper appreciation for the practice of environmental health at home and abroad.

1992-93 Sabbatical Exchange Visit to the United Kingdom—Part I

Gary Coleman, R.E.H.S., M.S.E.H.

Introduction

On the trip home from the 1992 Annual Educational Conference in Portland, my wife, Holly, also an environmental health professional, suggested that I enter the sabbatical exchange program competition. She suggested that the months I spent in Thailand's refugee camps during 1981 acting as a volunteer sanitarian had impacted my career and provided me with many experiences that I frequently relate to anyone who will listen. I can understand that perhaps part of her motivation laid in her desire for some new stories.

After successfully surviving the selection process, my first contact with IEHO was Hazel Carter, director of education and training. Ms. Carter was extremely helpful in making arrangements, but even more so in making me more relaxed through her remarkable English wit. Early on she assured me that unlike my experiences in Thailand, I could expect modern plumbing in England. I was a bit disappointed that she did not seem to share my enthusiasm in locating the Loch Ness monster nor sightings of Irish leprechauns. After a briefing and a nap, I was to begin my adventure into the workings of the English system of environmental health.

Elbridge District Council

The Borough of Elmbridge is located southeast of London in the county of Surrey. (Refer to Figure 1 for a complete itinerary and map of my sabbatical visit.) It is approximately 48 square miles with a population in excess of 100,000. Over 1,000 food establishments are included in its over 4,000 regulated facilities.

The EHO office is headquartered in the district council complex in the city of Esher. Under the direction of a chief EHO, the 10 member staff is structured into two specialty teams with a principal EHO being in charge of each team. Robin Barnes, a principal EHO and my host, coordinated my introduction into the complexities of the British environmental health programs.

The district should be considered urban, and as such enjoys the benefits of having only 10 private water supplies located within its jurisdiction. The district is responsible for bi-annual surveillance and sampling of these systems. Notices may be issued to the owners to filter and/or disinfect the wells if needed. For purpose of contrast, Kentucky law does not authorize the issuance of notices to owner's private water wells.

During my stay I was able to visit a hazardous waste site that had just been

cleaned and was in the process of being developed for commercial use; an airstrip and car racing museum that was being affected by the planning program; food service and health and safety visits to St. George's Country Home (a care facility for patients with senile dementia), the Prince of Wales (a pub serving food), and Heathlodge (a care home for the elderly).

In Elmbridge I had my first encounter with English fish and chips, oddly in my view at least, purchased from a combination fish and chips shop and Chinese carry-out. It was very good, by the way. A traditional meal containing roast beef and Yorkshire pudding was served at dinner the next night, and my introduction to England had officially begun.

Milford Port Health Authority

My welcome to Milford Haven came by letter from David Rye, chief EHO for the Milford Port Health Authority. He warned that I was being "... banished into the outer fringes of the Kingdom, out of England and into Wales, ..." And, that "...it does rain in Pembrokeshire—but only twice a week usually, once for four days and then for three." With those warnings I went to catch my first train in England. To do so I took a train

Map Site	Dates	Host and Worksite
1	2/27	Hazel Carter IEHO Headquarters
2	2/27-3/3	Robin Barnes Elmbridge District Council
3	3/3-3/7	David Rye Milford Haven Port Health Auth. Pembrokeshire (Wales)
4	3/7-3/11	Glyn Hall Sedgefield District Council County Durham
5	3/11-3/14	Roy Collinge Calderdale District Council Yorkshire
6	3/14-3/17	John Freear S. Kesteven District Council Lincolnshire
7	3/17-3/21	Paul Jackson Taunton Deane Borough Council Somerset
8	3/21-3/24	Ray Smith London Borough of Hounslow
9	3/24-3/27	John Tiffney Mole Valley District Council Surrey



Figure 1. Itinerary and map for 1992-93 sabbatical exchange visit to the United Kingdom.

into London, then the “tube” to the proper station. Let me warn the unprepared, don’t be alarmed that there are no garbage cans in the railroad station. They have been removed to eliminate possible hiding places for bombs. Also, arrive early, and if you are using BritRail passes purchased in the U.S., exchange them for your official pass. Allow time, the “ques” (waiting lines) can be slow but trains leave promptly as scheduled.

I wasn’t sure what I was to do in a port health authority considering that Kentucky is several hundred miles from the ocean. Kentucky does have ports located along the Ohio River and airports in the metropolitan areas. A late afternoon arrival precluded all but a quick drive around town. The next morning I began learning the role of a port EHO. David’s staff includes two other EHOs, launch pilots, and crew. They began their indoctrination of this land lubber by taking me straight out into the bay. During my stay we boarded tankers, such as the Mathraki, a Greek ship; the Bentwood, a British ship; and the Fosnia, a Norwegian vessel. In each we visited galleys and the engine rooms. Also, we boarded a German

ship carrying oil industry cargo. The other boarding was of an Irish ferry which makes the crossing from Ireland to Wales twice daily. The size of the ferry astounded me. David explained that the vessel was built in Bermuda to Norwegian standards. The ship can be likened to a small mall with three theaters, a large restaurant, several snack areas, a duty free shop, and two levels of car parking.

We visited the Nayland Marina for a quick look around. David informed me that the marina, though inactive during my visit, fills with yachts during the summer months. He or one of the EHOs visits the marina practically every day during that time for the purpose of observing and searching for imported domesticated animals, such as dogs and cats. The EHO’s concern is importation aboard a boat bound from a rabies environment. The United Kingdom is free of rabies. Europe is not. Any domesticated animal brought into the country is automatically quarantined for six months. As a matter of course the British EHO has a great interest in rabies, or I should say in keeping rabies out. There is much concern with the

opening of the channel tunnel which may make ingress of rabid animals possible.

We next visited a vivier, Oneida Fish, a purveyor of live shellfish. The establishment distributes lobster, crayfish, spider crabs, shrimp, and cockles. The owners refurbished a building originally built to breed earthworms. Within the facility large flat 8-10-inch deep beds, one above another, rise to the ceiling with approximately a 15-inch separation between each layer. Earthworm harvesting was not practicable due to a lack of work space between the pans, and the business failed. The live shellfish seem to thrive in these pans. Our visit to Oneida Fish was darkened the following day when we learned the owner had had a heart attack.

Nearly dawn and at low tide we rode the launch as far upstream as we could without going aground. From there we rafted upstream until we could wade in the backwaters. For the first time in my life I was seeing oyster beds. Owned by Joe Carew Oysters, the wooden racks hold several cloth, open-weave bags of oysters on top of them. During low tide the oysters are out of the water. The beds are approximately 5-feet

wide and 30- to 40-feet long. Oysters take up to four years to mature; must be rebagged about every three months due to the maturation process; and must be washed with a high pressure wash every two weeks. When mature they are moved to a processing plant where they are "purified." Mr Carew sells his oysters in bulk or in 6- or 12-unit plastic containers. The river bed is subject to pollution from upstream sources, and to a small degree from contaminants entering with the rising tide. Upstream from Mr. Carew's operation is a tourist trailer park which operates about eight months a year for tourists. A sewer line discharging effluent into the river is apparent. Natural cockle beds located above the oyster beds, but below the discharge are thought to lessen the bacterial load going to the oysters. After discovery of the drain, the authority changed the sampling schedule from once per fortnight to weekly. The view of the mud flats and the sun rising on the bay was well worth getting out of bed early and wading into the cold water around the oyster beds.

My visit to Milford Port Health Authority left me with a feeling for the international aspects of environmental health. It made me aware that cooperation among nations is possible. Port health authorities, although reliant upon their country's laws, seem to operate more on World Health Organization guidelines. Ships are inspected for rats on a routine basis. "De-ratting" certificates are accepted from one authority to another on the basis of that authority's listing by WHO.

In the United States inland catfish farms, small farm ponds, pay fishing lakes, and coastal shellfish harvesting areas pose questions for environmental health officials. My visit to Milford Haven made me more aware of the need to be curious concerning such areas in this country that I rarely consider to be a problem.

I told David that I enjoyed the visits we made, but I could see problems doing a boarding in freezing rain and snow; however, if a port health EHO position was available in one of the colonies such as Bermuda, I would like to apply.

Sedgefield District Council

Milford Haven to Newcastle via train is an all day ride, with stops in Swansea and London. In London a "tube" ride from one station to the next is necessary. Two and one-half hours later on the InterCity via the

Edinburgh route you arrive in Newcastle. Stepping out of the station in Newcastle is strange. The buildings do not look like London's, but the London cabs are there. I was met by Glen Hall, Sedgefield district's principal EHO, who gave me a tour of Newcastle prior to leaving for the more rural setting of the district. The city was impressive with some of its age showing, but I was struck most by the blackish coloration of the buildings. The staining was indicative of extensive use of high sulphur coal. Buildings cleaned of the smoke stain were in high contrast to those not cleaned. The burning of high sulphur coal was banned with the inception of clean air regulations.

I learned that Sedgefield district is a very progressive area, hungry for economic development. The area's dependence upon coal mining and tobacco farming parallels the economic bases in Kentucky. The coal collieries (companies) that operated in County Durham during the 1800s parallel those in eastern Kentucky that seemed to spring up overnight in the 1920s. Had there been large distilleries and horse racing, I would have thought I was home. The area is in transition and to me it was extremely important to observe the effects of this transition.

In eastern Kentucky strip mining is rapidly replacing deep mining just as it occurred in County Durham. Strip mining or open cast mining as the British refer to it has nearly ceased in Durham. Open cast mining produced large areas of land that when viewed from the surface appeared ideal for many types of development. Below the surface there is much uncertainty as to the contents. Many of the areas in Kentucky and in Durham may contain only coal refuse, but others may contain hazardous waste and who knows what else. The role of the EHO is apparent when the local economy may depend upon our studies and our decisions in ascertaining whether land is considered as allowable development.

I had the opportunity to become acquainted with two members of the Sedgefield district council. Glen introduced me to these gentlemen at lunch, and I became quite fascinated with them. While talking with Joe Lee and Bill Waters on an informal basis, I saw mental pictures of coal miners that I have known in Kentucky. Having spent their lives involved with the coal industry, they are desperately trying to find political methods to save their industry.

Environmental impact studies suggest that closure of the collieries and resultant non-operation of the water pumps will have a negative impact upon the environment (groundwater). The plight of Durham miners and the possible environmental plight due to unnecessary mine closures have been brought to the attention of the Coal Institute in Washington, D.C. There may be no saving British coal mining, but the closure of the mines in an environmentally safe manner should not be glossed over and forgotten by everyone but Glen and his staff.

County Durham is fascinating. Driving by Hydro Polymers, a major producer of poly vinyl chlorides, and seeing promotional materials being distributed to attract other industries to the area, contrasts sharply from driving by Durham Castle and Durham Cathedral. The area is one of contrast, modern and ancient, urban and rural. It is culturally important to balance these diversities. Correctly, the EHO is actively involved in land use planning. I was told that if a resident builds anything bigger than a 6-by 6-foot shed, plans must be submitted and approved by the planning council. Coming from eastern Kentucky where people own their property "sky high and hell deep," I am impressed that environmental health officers intertwine with the planning department so well. I was told that the relationship was shaky in the beginning, but trust between the two departments has developed. Our influence needs to be exerted with developers required to consider the health of the people as well as the health of the environment. Sedgefield EHOs are well on the path to having this influence in their area.

Interest in developing a computerized, comprehensive database and scheduling program is high in Sedgefield. The district utilizes an in-house IBM AS/400 mainframe. The environmental health program has eight terminals and two personal computers shared by a staff of 23. Considering that there are over 1,400 regulated premises and some 40,000 district-managed housing units, I find it hard to understand how this was handled before the age of computers. A commercially available database is being used that does allow for some local customizing. The system is connected to a regional network that permits exchanges of information among its subscribers.

Typically the system is used to generate follow-up visit schedules for complaints

and establishment inspections. The system tracks status of complaints and enables the inspector to include standard paragraphs into letters to operators. This is important to Glen's staff as they are under program directives to react to the public's complaints on a designated time basis.

In the Sedgfield district, I visited a knackers, essentially an animal feed preparation plant using carcasses of animals found dead. In years past there seems to have been a specialty in the slaughter of horses for this use. Today the range of animals encompasses cattle, sheep, hogs, etc. The meats are sterilized and colored blue to prevent entry of these products into human food.

Another new experience for me was a visit to a sheep slaughterhouse. During my years as an environmental health specialist I had never been in a commercial slaughterhouse. Health environmentalists in Kentucky are not trained to inspect animal carcasses, as slaughterhouse inspection in Kentucky is a function of the Department of Agriculture. The visit was informative and fascinating in respect to the diversity of work performed by British inspectors.

Calderdale District Council

The geographical diversity of Calderdale district compared to Sedgfield district located only a short train ride away was stark. Staffing of this more seemingly rural district was also stark. Roy Collinge, my host and director of the environmental health program, related that there are only five EHOs to complete inspections of some 3,000 food establishments and 5,000 health and safety inspections.

Within easy walking distance of their district office in Halifax, I had the opportunity to visit an enclosed borough market. I was surprised to see meats and meat-filled pastries being sold unrefrigerated. The practice is apparently not one that the EHO is happy about, but current regulation cannot restrict holding temperature if the product is disposed of within four hours. The market was an open structure with stalls containing various vendors. There did not seem to be a particular plan of what was allowed next to the other. A lack of sanitary facilities seemed to be secondary to worries of air circulation and contamination sources.

I had the opportunity to visit Piece Hall, a complex formerly used as a marketplace for locally produced cloth prior to mills and the Industrial Revolution. The building had

been restored and now houses arts and crafts shops. These shops were secondary to the purpose of our visit. The EHO, Lisa Drinkwater, was conducting investigations of temporary food booths.

I told Roy of my interest in private water and sewage systems and asked to see some of the problems and solutions in-

volving his department. I was taken to Jerusalem Farm, a training and resource center established for the purpose of teaching the art of life in the country. The water source for the center is a spring which outcrops on the hill above the center. The water is stored in partially buried, plastic tanks providing gravity fed water to the center's rapid sand filter and ultraviolet disinfection system. Sewage treatment for the center is accomplished by means of a concrete septic tank and rock filter. Effluent from the tank is gravity fed into a lateral piping system. The effluent naturally finds its way down to the bottom of the embankment. A further complication involves the heavy clay soil and high water table near the creek. The effluent surfaces and flows into the creek. This situation was very reminiscent of situations back home that we discover in Pike County on almost a day-to-day basis.

EHO Alan Hardwick provided me with a history of septic tank and cesspool systems used in Calderdale. The rural areas have the same problems with failing systems that we find in rural areas of Kentucky. We have the same types of pollution problems, including the most important to an EHO whether American or British, which is contamination of drinking water supplies. Historically, drinking water contamination was the basis Chadwick used to convince Parliament to fund sanitary inspectors, the precursors of today's British EHOs.

South Kesteven District Council

Leaving the moorlands of Calderdale, I traveled to the flatland of South Kesteven.



Meat sales from a mobile unit during a town market day.

I was met at the train station by my host, John Freear, head of environmental health services for the district. As we drove through town, I noticed a familiar sight, a Kentucky Fried Chicken restaurant. This was one of only two fast food American chains I saw while in England. The other was a McDonald's in London. John arranged a visit to Padley's the following day. Padley's is a poultry supplier for KFC, a small account for the firm which has annual sales of approximately \$375 million. Inspection of such firms in the U.S. are in the domain of the Department of Agriculture, thus I was interested in observing the production processes. I had no concept of the mechanical dissection of the carcasses. One of the managers informed me that some sister plants in the U.S. were much more mechanized. I was fascinated by the precision of the machines as they removed the wings, followed by the back and lower breast. The mechanical process ends here and the breast halves are split manually. The legs are split from the thighs also by hand. The chicken is then breaded and frozen. Liquid nitrogen and drum refrigeration are both used to freeze the product rapidly. Padley's exports much of its product throughout Europe thus adhering strictly to EEC guidelines. Though very impressed with this firm's operation, I mentally noted many control points that could potentially fail and result in foodborne illness.

Students in the district have become actively involved in an acid rain study. The Old School was of particular interest to me, as I learned one of its graduates was Sir Isaac Newton, and that he had handcarved



Use of uniforms and gloves by this food worker adding decorative chocolate rings to a cake is a common practice throughout the British food manufacturing establishments.

his name into a stone windowseat at the school. Children at Old School are gathering and analyzing data from rain gauges they have designed and made. On the playground the sight of children running and playing in ties and blazers, a standard mode of dress for school children throughout England contrasts sharply to today's "grunge look" that is popular in American schools. I feel that Sir Isaac Newton would be pleased with the environmental health officers working with the children in his former school.

A visit to Grantham Slaughterhouse with a lesson in carcass examination was very educational. Checking methane detection tubes buried in a site where the town of Sudbrook is planning to build a town hall, a site that was formerly a "tip," a waste disposal site, or as I call them a "dump," was interesting and not part of a normal day in Pike County. However, that afternoon I visited an establishment that I might wish to, but probably never will, forget. I was told we were going to visit a "maggot farm" due to the firm's neighbors complaints of odors. During the drive to the farm, I asked a few questions concerning the operation of the "maggot farm." Not wishing to appear completely ignorant, I contained direct questions and asked one that brought me some temporary mental relief. In answer to my question I was told that maggots are used for fishing bait and that is why they are farmed.

"Ok," I thought, "we are talking about grubs, not fly larvae." I soon learned that I

planned by someone wanting to get even with their supervisor, Mr. Freear, because the odor would linger on and on. Once my initial shock of knowing that someone was actually breeding flies as an occupation subsided and the kidding stopped, I was told that the sale of fly larvae is "big business." The owner related that his farm is a smaller one, and he averages selling about 500 gallon of maggots per week at the equivalent of \$7.50 per pint. While doing the math, consider this sidenote, some fishermen prefer red maggots, thus the media in which the maggot matures must be considered. The normal maggot is nurtured on a diet of decaying fish and chicken spread out in beds on a concrete floor and covered. The EHO concerns with this operation are of nuisance basis and worker exposure to ammonia. This farm has installed a massive filtration system within the building to deal with ventilation problems. Maggot farmers are continuously experimenting with different methods to alleviate problems caused by the waste that is used in the maggot nurturing beds. They are reported to be very receptive to any ideas that EHOs present to them to contain their nuisance problems. This was an unforgettable and unique visit, as we have no commercially operated maggot farms in the hills of eastern Kentucky.

The chief EHO meets regularly with the district council to advise them, or to defend his division on occasion, I suppose. I was invited to attend a meeting of the council's environmental health committee. The meeting flowed with typical English order

had been victimized by Sir Winston Churchill's "division by a common language theory." When we walked into the building and the stench of ammonia filled my nostrils and seemingly filled my every sensory preceptor, I knew we weren't talking grubs. In the sense of British humor I was informed that my visit to the farm was probably

and charm until an agenda item concerning changing the method of household garbage collection was called. A proposal to institute the use of wheeled bins caused a somewhat fevered debate. There was much debate before the council voted to support continuance of the existing black plastic bag system. Although the public health implications favor use of structurally sound enclosed bins, the majority of the council felt the issue to be economically not feasible at present. The committee members seemed very serious in their concerns, asking rather technical and comprehensive questions of the heads of divisions. John, in his written and oral report to the committee was very comprehensive, reminding me acutely of the need for comprehensive reporting.

Taunton Deane Borough Council

The next stop was Taunton which is located in the County of Somerset in southwestern England. The area is considered rural with a good agricultural base. Apples are a mainstay in the area, but because of what was attributed to EEC-inspired changes, European apples are being brought in cheaper than they can be grown. As we drove through the area, Paul Jackson, chief EHO in the district and my host, pointed out several farms where the trees were being cut for other planned uses of the land. I had been warned that Somerset cider could prove to be dangerous due to its alcoholic content. I reserve comment on the accuracy of those warnings; however, I will relate that I visited Sheppy's, a family-owned and operated cider manufacturer of many years. Mr. Sheppy was a very courteous host, who reminded me of Alistair Cooke, the very formal British TV host. Mr. Sheppy is a man of years and experience who informed us of the processes and results of correct cider production. In the tone of British humor he relayed that a rat, bird, or even a sheep that fell into the open vats would give the brew "body." Due to time limitations, I was unable to observe the more sterile processes of a modern cider factory to Sheppy's on the farm production.

Both professionally and personally, Paul Jackson is actively involved in community planning. Upon learning that we share this interest, he arranged a luncheon meeting with the head of Taunton's land use program, Don Alder, and Paul's wife, Judith, a solicitor for that program. Following lunch,

Mr. Alder and I walked through the downtown area, and he pointed out how the new additions were fitted to the old. Efforts are being undertaken to avoid the rush of businesses to the suburbs. In Taunton, the efforts are working—a lesson I am sharing with the officials of Pikeville, where only law offices, banks, and government offices are left. Most U.S. cities have not learned either, which leaves most people shopping in malls or strip shopping centers.

During my stay in Taunton, I had my only formal exposure to the medically directed public health programs. I accompanied Dr. Tony Hill to the area health and public health lab, where I observed a weekly conference with the heads of the lab and hospital nursing staff. The meeting that morning dealt with the revisions to the Infection Control Manual, a chickenpox case in the hospital nursery, a Hepatitis C case (thought to be connected with tattoo parlor artwork), and Flu A & B. Following the meeting, we went to his office where he showed me the computerized system for gathering information on communicable diseases. He pointed out that mass childhood immunizations, personal contact with parents, and repeated follow-up had raised the level of protection to children under 5 years old to nearly universal status in Somerset.

Dr. Hill introduced me to the director of the county's sexually transmitted disease program. Without going into detail, the statistics for HIV infection fairly parallels the U.S. with proportions for urban versus rural areas. Somerset and Pike County have roughly equivalent numbers of known cases.

The Aids program is extremely progressive in Somerset, with very open and frank lectures in schools and a massive literature campaign. Through the program, condoms and needle exchanges are provided. Intravenous drug abuse was not originally thought to be a major problem, but the exchange indicators show over 250 users versus the 36 thought to need the program a year ago. Though separate from environmental health, ties with the medical side are easy to detect. The union of medical and environmental in a partnership seems to have very positive effects for both entities.

Another establishment I visited was Maynard's, a fifth generation locally owned frozen dessert manufacturer. Mr. Maynard met with us following the tour. The firm

provides high quality handmade desserts. As the firm exports its products, it is in the process of updating the facilities to meet EEC standards. Mr. Maynard stated that this renovation would cost in excess of \$1.5 million.

I visited Queen's College while in Taunton. College is another one of those "common language" terms as I will try to explain. Queen's is a private boarding school for about 800 elite students with 250 of them living on campus. The students' ages range from 5 years through 19 years old. Though most students are from families that are wealthy and generally aristocratic, students accepted at Queen's are also generally very intelligent and/or artistic. Students were observed throughout the facility engaging in what evidently were personal choice pursuits, some working with computers, another designing mechanics of some sophisticated apparatus, another painting, etc. The college has structural deficits as a result of its age. Sanitary facilities are not modern, but clean. The kitchen areas needed much updating and repair, but the situation seemed the same as in many of the schools I deal with in Pike County; educational dollars do not get directed for correction of environmental health related problems without some degree of force.

Andy Mathieson, an EHO who migrated to the sunny south from Scotland, joined Paul and me on a visit to the Saturday morning Taunton town market. The event has its history in traditional Saturday morning cattle and produce markets that were held throughout the country. On my visit I observed the livestock auctions and the problems of confining animals in small spaces. I was informed of the measures taken to police the area after the conclusion to prevent complaints of fouling and odors. We observed the sale of food products stored in such manners that neither of us felt feeling comfortable, but nonetheless were legal.

London Borough of Hounslow

This was my only urban visitation. From the airport to the office and to the home of my host, Ray Smith, I truly recognized the additional burdens of trying to work in a metropolitan area. Hounslow is faced with traditional urban environmental health problems with some twists. One, there is a

noise problem associated with the fact that the flight-path for Heathrow Airport is directly overhead. This means implementation of a noise program that actively pursues insulating homes and businesses and working with airlines to schedule arrivals at times when least inconvenient to the majority of the people. Another is that areas of the borough are restricted from growth due to greenbelt planning, while the population continues to expand.

Hounslow has over 4,000 establishments routinely inspected by six environmental health officers. Even using risk assessments to lessen the numbers, the task is looked upon as stressful by the staff.

Hounslow has a population of over 200,000 of mixed cultures. If English language signs were not visible walking down the street, one might not be able to ascertain which mideast Asian country he was visiting. This presents housing problems due to the inability of new immigrants to understand their legal rights. Another problem with this situation is that traditional customs don't always meet English standards. Explaining that traditions have to be compromised in order to meet standards is difficult for many to comprehend. Cooking methods are habits that are hard to change permanently as the operator has a tendency to revert to his lifelong habits, rather than adapt to the western standards. Simple communications also present problems. Much of the population are first generation immigrants who speak only their native language or limited English. The EHO who speaks only English must spend more time trying to effectively communicate or must return with an interpreter.

We visited Home Rouxl Ltd., a sous-vide manufacturing plant. A walk through of the plant, some background information, and time for questions gave me a better insight into this process that may become quite common in the future. The company's quality control manager explained that the company complies with French standards for sous-vide. Briefly, the process involves traditional cooking and cooling. The product is vacuum packaged, then pasteurized to a minimum temperature of 72°C. The product is then chilled to 0°C to preserve flavor, texture, aroma, and nutritional value. The whole building is maintained at a constant 10°C temperature. Home Rouxl customers include prestigious hotels and restaurants.

With London traffic, overcrowding, diversity of cultures, and the dynamics of mammoth potential problems (i.e., responsibility for the safety of 30,000 catered meals per day for British Airways) the Hounslow EHO is faced with multiple frustrations.

Mole Valley District Council

Mole Valley, so named for the illusive Mole River which burrows and re-surfaces often during its meandering to the sea, adjoins the densely populated boroughs of London. The main market town, Dorking, and the surrounding rural area appear to be prosperous and continuing to grow. The streets of Dorking are alive with activity but conjure up memories of the past with their numerous antique shops.

My wife, Holly, joined me on my last day in Hounslow and my final site visit. We were hosted by John Tiffney, head of the environmental health program in Mole Valley and president of IEHO. During this visit John and his staff introduced us to the problems and programs in Mole Valley and brought Holly "up to snuff," filling in gaps, and otherwise answering questions that she had. Until this point when I found myself answering some of her basic questions concerning British environmental health programs, I had not realized the positive impact that my sabbatical was having.

In the center of Dorking, we visited a meat market on one of the main streets. At the rear we were shown a recently closed slaughterhouse. The closure was said to involve the owner's decision to not expend the cost of updating to EEC standards. The EHO was not disappointed with the owner's decision as the establishment had a history of problems, including noise and odor complaints, as well as problems with animals breaking free and running the streets. Cattle and antique shops are not compatible.

We visited the town's open market where Holly first saw fresh cuts of meat displayed at ambient temperatures. Her facial reaction showed me how I must have looked when I first saw this same practice. While British EHOs may not agree with this practice, no mass foodborne illness has been attributed to it. This may be credited to "freshness" due to the limited time lapse from the slaughter to the table and small specialty meat shops where the owner specializes in that one product. The markets provide a

link to the past for the British people, a way of preserving a way of life, providing a social aspect to their lives and at the same time adding some value to their dollars—pound.

One of the aspects of British life is the preservation of customs. One of these is the door-to-door delivery of milk and dairy products. These products are delivered unrefrigerated on a small flatbed vehicle referred to as a milk float. I was unable to be in the right place at the right time to photograph one, but they are there and are almost universally used. Another is door to door delivery of fresh fish. Well, I exaggerated, these trucks do not go door to door, but generally set up on the street and operate like a type of temporary "fish market." Sales are made from enclosed vehicles equipped with a handwashing sink, iced display cases, and scales. Fish is maintained in or on ice at all times. We were informed that these deliveries have a history of safe use, and thus are not considered a problem.

We visited a huntsman's club which provides dogs and horses for hunting purposes. The purpose of this visit was to observe the preparation of food from carcasses of animals found dead in the fields. This product is fed to the foxhounds. A potential for problems from this activity manifests itself in odor complaints, insanitary conditions around the somewhat open cooking area, and improper disposal of bone, offal, and hide wastes.

We visited a house being remodeled using a district-administered housing grant. Grants are contingent upon improving or adding sanitary facilities such as running waster or sewage disposal systems. Thus the grants serve as a mechanism to improve the environmental health status of the property. This particular house was an older house that had fallen into disrepair. The owner was doing sweat equity in order to stretch the grant money to its limit. This program would seem to provide a positive relationship between the EHO and the home owner, in that it helps rather than orders.

One of our last official activities was a visit to a Mole Valley winery. We were informed that this is the largest winery in Europe, a fact that I would have missed in a Trivia game, thinking that honor would probably have gone to Italy or France. The winery was preparing to open to the public for tours. We were there to observe the

kitchen of the facility. The facility was new with all the latest in equipment, including color-coded cutting boards and matching color-coded knife handles. During this inspection and due to the fact that this was a new building, I noted the installation of plumbing piping was not hidden inside the wall but installed flush with the interior wall.

Throughout my visit I had been under an impression that installing plumbing along the interior wall had been done as a quick method of installation without having to cut into walls in existing buildings, particularly as many buildings are constructed of solid stone exterior walls. As this was a new building, it was obvious this method did not parallel with the common practice in the U.S. of hiding the piping inside the walls. There seems to be advantages of this British system in that leaks are instantly observed, and repairs and modification can be made without extensive disturbance to the wall. Yet, a disadvantage is seen in how the exposed pipes create obstacles to cleaning. Due to easier installation I suggested to Holly that we should install plumbing "British-style" in our home. Her condescending "we will see" look didn't prevent me from thinking that this may be a logical practice in food establishments.

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The second part of Mr. Coleman's report focusing on "points of intrigue" will appear in the September issue of the *Journal*.

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In the July/August issue of the Journal, the 1992-93 recipient of the NSF International-sponsored sabbatical program, Gary Coleman, shared his experiences of the United Kingdom's environmental health program as he led us through a tour of various regions of the U.K. In this second of a two part report he provides us with more specific impressions on what he terms, "points of intrigue."

1992-93 Sabbatical Exchange Visit to the United Kingdom—Part II

Gary Coleman, R.E.H.S., M.S.E.H.

To list environmental health programs conducted in the United Kingdom would be redundant as they are nearly the same as those conducted in the United States. There are twists to methodology and/or complexities that I found fascinating. I have described these points of intrigue below.

Professionalism

The British environmental health officers (EHOs) seem to exude professionalism. Perhaps some of this is influenced by their more formal mode of dress, which was one of my first observations. Suits were standard attire among the EHOs, except at Milford Haven Port Authority where because of the nature of the job, sweaters replaced dress jackets. I have the impression that the EHOs consider themselves to be "professionals." From my observations he/she is treated as a professional by not only the district councilors, but also by the public at large. From discussions with my peers, most American health environmentalists, though trained and experienced, feel they are viewed as having a "vocation" rather than a "profession."

Perhaps the fact that a British EHO enters the profession educated and trained, rather than requiring training, accounts for a better, more professional attitude. As environmental health degrees in the United States do not require lengthy residencies, a health environmentalist will not emerge as fully prepared as the EHO, who serves at least one year of supervised field service.

The fact that a standard has been set by the profession and upheld by the government

precluding the hiring of a non-certified EHO at the EHO level adds to that professionalism.

Professional Preparation

The amount of preparation required in the United Kingdom to become an environmental health officer is intriguing. Each officer is credentialed by the Institute of Environmental Health Officers. Educational background is of prime concern as a degree from an IEHO-accredited institution is required. This may involve three years of classroom study and one year of residency in a district office. The candidate may be supported by the district throughout the four years, or he/she may be supported by the district only during his/her residency. I have not been able to ascertain the requirements after graduation for remaining with the district supporting one's education. I was amazed that one district employed a person with a doctorate in food technology as an environmental health technician because of his inability to meet the specific educational requirements of an EHO.

The concept of hiring only persons with an environmental health degree seems foreign to us in the United States. If employment advertisements for health environmentalists are any indication, Kentucky, as well as many other states, requires only 24 semester hours in the biological sciences to qualify for such a position. Effective July 1, 1993, Kentucky legislation requires a person entering the profession to become registered by the state within a year of employment. Before passage could be gained for this law, conditions of recruitment

which would have required a degree in environmental health or equivalent to qualify for employment were watered down to only a 24-hour requirement.

Multiplicity of Disciplines

I was surprised by the multiplicity of disciplines that the British EHO must master. I do not think that many can practice in all disciplines for which they have been trained, but having received three years of broad-based training may account for their ability to switch gears rapidly. I was surprised to see so many functions, including ambient sampling and meat inspection, being performed on the local level as is the case in the United Kingdom.

Mix of the Old and the New

I was impressed with the age of things in the United Kingdom, buildings of such awesome size as Durham Cathedral and Westminster Abbey. It is hard to imagine the work required to complete such a structure as Durham Cathedral in the eighth and ninth centuries. Yet not only is it standing, it is used daily. In Swansea I walked down the street observing a crumbling castle situated alongside a modern glass skyscraper. I attended services in churches that were built in the twelfth century. Though upkeep and comfort are not always economical, these buildings are commonplace in the United Kingdom.

Use of Mass Transit - Trains

I became a quick convert to trains and subways ("tubes" in London). Commuting by train four weeks in the United Kingdom

made me wish the United States had a comprehensive network of passenger trains—good for the environment, good for the body. It became very relaxing to listen to the clack of the rail and to be able to converse with complete strangers. I found that being from the United States spawned many questions. Some people had heard of Kentucky, especially the Kentucky Derby, which is spelled the same but pronounced “darby” in the United Kingdom. One was dismayed to learn that Jack Daniels is a Tennessee sour mash whiskey, not a Kentucky sipping bourbon. Like most Americans, the British people I talked with thought environmental health officers were “environmentalists,” people out demonstrating against destruction of the rain forests. Though very proud of my personal membership in environmental preservation support groups, there is a stigma to the term “environmentalist” that tends to cast a negative into some conversations.

Contract for Service

Some discussions with EHOs concerned the possibility of contracting for environmental health service by bid process. Some thought the district councils might be receptive. I think this idea crosses the minds of many environmental health professionals today. How can we feel comfortable watching the privatization of services for penal institutions, municipal sewage treatment plants, garbage collection, and landfills. I dare not ask, “Are we next?”

Reorganization of EEC Membership

Without listing specific changes in sanitation requirements resulting from the United Kingdom’s membership in the European Economic Community (EEC), I sensed that these changes seem to be causing feelings of distrust concerning product imports, and, indication that changes to meet standards are excessively costly and often unnecessary. In order to equate what impact the EEC standards would have on the United Kingdom, I have been trying to think in terms of what it would be like if all our laws and interpretations came from our federal government. As my son is prone to saying, “Awesome!”

Absence of Medical Health Officer

Since 1974 British environmental health programs have functioned outside the public health department, an institution that no

longer exists as an independent entity. The medical functions of health departments have been absorbed into the national healthcare system. Environmental health programs function as an independent function of the district council. The physician, as contracted by the environmental health program, is contacted on an “as needed basis” by the EHO and is essentially considered a resource in his performance of disease investigations.

With the extensive training of the modern EHO, it is rarely necessary to call the medical practitioner regarding the epidemiology of foodborne illnesses nor for most other environmentally related communicable diseases, such as Hepatitis A. The physician is considered necessary for prescribing certain test procedures and interpretation of such, as well as more esoteric determinations concerning symptoms of cancers and organ damage, as might be environmentally related.

The structure in Kentucky could easily head in that same direction. Today only a few medical health officers serve as administrative heads of departments. The trend for the past 20 years has been to replace physicians with administrators. Although no official actions by the state of Kentucky have been taken that indicate a trend in creating a separate environmental health department nor of incorporating environmental health programs into existing agencies, such as our Department of Agriculture or Cabinet for Natural Resources, movement toward universal healthcare reform has left many of our health environmentalists wondering if they will fit in the emerging system. After 20 years of practice, the British EHO seems very comfortable working outside the administrative purview of the medical community.

Computerization

Both British and American environmental health officials suffer from a lack of computerization. Both suffer from inconsistency of programming and system incompatibilities. Each of the eight authorities I visited had a computer system, but none the same one. Each system was specifically tailored by that district’s need. As in Kentucky I felt that most considered themselves to be computer illiterate. Traveling from one district to the next, I encountered different degrees of enthusiasm. Almost consistently the supervisors were anxious to

gather data, but field staff saw the machines as a method to check on their performance. Local district mainframes dominated the type of systems used. In those districts where true computers were observed, they were on the supervisor’s desk. Districts varied as to whether information was accessible via an EHO’s personal terminal or indirectly from the terminal via printed reports from the clerical staff. Informational input into terminals varied by district. Networking on a national basis is not in place except that Milford Haven Port Authority had the capability to contact any other port health authority.

In Kentucky each local health department is on-line 24 hours per day, thus enabling each department to transmit to any other department and to the state agencies. Based on the FDA’s early computerized Sanitation Program Information Filing system, Kentucky now utilizes an extremely sophisticated 24-hour per day on-line computerized information system. Though it lacks the ability to be specifically tailored locally, it is a start in comprehensive programming covering our full complement of programs. As in the United Kingdom, the United States has no national computer program being used by all states. Nationally there are software and call-ups available to those with computers in their office, but not widely publicized and not tied to Kentucky’s mainframes.

The same type of situation exists for British and U.S. environmental health officials as to degrees of equipment usage. For example, on a person by person basis in my Pike County office the degree of terminal usage varies from “not at all” to “comprehensive” depending on that particular individual’s interest and familiarity with computers. Access is also dependent upon the director’s attitude and/or budget. Unless adequate funding is made available to equip individuals with computer equipment and adequate time for on the job computer education, low usage by the environmental profession will continue.

Hand-held computers are used for food control programs in both countries in very specific localities, and I confess envy for those that have reached this level of computerization. Although I have seen demonstrations of these units, I confess that I have not seen them in actual field use. I was told that at least one district in London was so equipped; however, not knowing which,

