A PORTRAIT OF THE ENVIRONMENTAL JOURNALISTS IN MEXICAN NEWSPAPERS

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ABSTRACT

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This study describes the characteristics and newsroom trends of Mexican newspaper environmental journalists in 2003. A survey was conducted among 70 environmental reporters from 15 of the 32 states of Mexico. The study found that the average age of Mexican environmental journalists is 35, sixty percent were male, and almost 80 percent had a bachelor's degree in communication. One of the biggest challenges Mexican environmental journalists face is little access to government information about the environment.

This study found that for this population no relationship exists between the size of the newspaper and the output of environmental stories; that there is a weak direct correlation between the larger papers and the time spent on the beat; and a moderate correlation between larger papers and training.

This study suggests that news patterns of Mexican and American environmental journalists are similar, such as time, space and budget constraints.
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Introduction

Environmental journalism has grown in importance because environmental news is related to problems affecting the health and quality of life. Past research shows that this journalistic field is relatively new; it was not acknowledged within American newsrooms as a specific beat until the mid-60s (Shoenfeld, 1983).

Hannigan (1995) attributes some key events to the increase in media coverage of the environment: the first image of the earth from the moon in 1969; environmental catastrophes; the rise of environmental activism celebrating the Earth Day in 1970; legal events like the Superfund, and such international events as the 1992 Rio Summit.

To what extent has the environmental beat been developed in Mexican papers? For more than a decade, journalists have acknowledged the need of developing a specialized beat on environmental news. In 1992, during a seminar on the role of the media to promote an ecological culture, academics and journalists discussed that media owners should open spaces for environmental reporting.¹

Compared to developed countries like the United States, where many newspapers hire reporters to cover the environment full time, Mexico is far behind this stage. The Mexican press model has followed the United States free market model (Torres, 1999). But different from the American model freedom of the press, the Mexican press has functioned for many years under the collusion between the government and the owners of the media. In the context of the
Mexican media, this study describes the characteristics of journalists covering the environment in Mexican newspapers. An environmental journalist is defined as the reporter who “gathers news relating to mankind’s effect on the environment and ecosystem” (Atwater, 1985). This study is important because knowing the profile of the professionals who write stories about environmental issues contributes to a better understanding on this type of journalism in Mexico.

Chapter I shows the “big picture” of Mexican print media in which environmental reporting has been developed. The presidential race victory of the opposition’s candidate Vicente Fox in 2000 represented the end of the 70 years rule of the party called PRI and the beginning of a democratization process in Mexico. This process has also had an important impact on the Mexican press.

The objective of this study is first, to describe personal and professional demographic characteristics as well as newsroom trends of the journalists covering the environmental issues in Mexican newspapers. This work shows the results of a survey conducted from February to October 2003 among Mexican newspapers reporters.

Second, this study analyzes if the size of a paper is related to the environmental beat. Are larger papers giving more importance to the environmental beat? Newsroom trends such as the amount of environmental stories produced during a year, time spent on environmental stories, and training on environmental journalism were variables selected.

Third, under an international perspective, the results of this study are compared to those drawn from a survey (Detjen et al., 2000) among American
environmental journalists to identify similarities and differences. Knowing the limitations of the different cultures and economies between these two countries, this study suggests that there might be similar newsroom patterns regarding the environmental beat.
In general, official control and corruption have characterized the Mexican press for many years. But recently, the Mexican press has been going through a process of transition in which the media’s political orientation rather than official control influences their coverage. From censorship and self-censorship to freedom of the press the process of transition toward a democracy is analyzed by Massachusetts Institute Technological Political Science professor Chappell H. Lawson.

The story of media opening in Mexico deserves to be told, says Lawson, author of the book *Building the Fourth Estate: Democratization and the rise of a free press in Mexico*. The book is an analysis of the Mexican press during the last 20 years. Based on field research through extensive interviews with newspaper publishers, journalists, authorities and scholars from Mexico, Lawson conceives of the arising of an independent media and democratization as “interacting and mutually reinforcing processes.” It is a Mexican democratic process expedited by the 2000 elections in which the ruling Institutional Revolutionary Party lost the presidential race after 70 years in power.

Lawson states that scholars have acknowledged the important role of media in a democratization process: “Without...diverse and independent press, it is difficult to see how citizens can acquire sufficient information to make
meaningful political choices.” However, he notes that there is a lack of research on how a free press arises. “Nor do they [scholars] understand the political consequences of changes in media coverage on democratizing countries.”

Lawson also argues that political liberalization does not necessarily produce by itself a free press. In Mexico factors like journalistic norms and market competition between print media outlets also determine the media behavior. “Market competition plays a powerful role in encouraging the press to experiment with more independent coverage.”

Beginning in the mid-1980s changes in media coverage influenced the political transition, giving the voice to new civic groups in Mexico. Media opening thus “increased scrutiny of government actions and decisions.”

Authoritarian political system

From the creation in the 1930s of the Institutional Revolutionary Party (called the PRI) and until the mid 1990s, the “official” party in Mexico’s political system controlled and censored the Mexican press. Peruvian writer Mario Vargas Llosa called it “the Perfect Dictatorship.” Media was one of the institutions manipulated to preserve an authoritarian government.

Lawson says that opposition parties were allowed to some extent: “But serious challenges to PRI rule were invariably thwarted through an elaborate
system of corporatist co-optation, electoral “alchemy” (fraud), and selective repression.” 6

Lawson explains how a subtle government control of media was more effective than direct repression. Media was used for “private gain and political legitimization,” he says. For example, members of the political elite founded or bought newspapers that received government subsidies, a way of co-optation. "Physical repression, direct government ownership, and official punishment for receiving banned information were all rare. By contrast, corruption and manipulation of broadcasting concessions were extremely common," Lawson documents.

Direct state ownership of the media was limited to Notimex, the main news agency, and the El Nacional newspaper. Rather than ownership, government preferred to sponsor pro-government papers by “providing credit, technical assistance and subsidized newsprint. “Known as the culture of collusion, “media owners and PRI leaders confluence of interests assured their economic prosperity in exchange for the use the media as informational vehicle. For example, Excelsior and El Universal, two leading papers founded during the revolutionary period (1910s) “had close ties to the PRI.” 7 Others papers such as El Sol chain, Novedades, El Diario de Mexico, El Dia, and El Heraldo de Mexico were part of the culture of collusion. “In order to prosper
economically, they needed the state to provide them with broadcasting concessions, subsidized inputs, government advertising, protection from competition, and lucrative business opportunities.”

Another official control over the media was the government’s publicity. This practice created an economic dependence to the official advertising and made them vulnerable to government pressures. In the print media, the state provided about half of all advertising revenues. The official publicity worked through the so-called gacetillas, a paid insert written by the government and disguised as a newspaper article.

Control over credit was also critical for some pro-government papers, such as Excelsior, which owed $16 billion pesos by 1992. But more importantly, was control over the press through subsidized newsprint. PIPSA, a private-estate company, had until the 1990s the monopoly control to produce and import newsprint. “Outside Mexico, the cliché was that PIPSA provided the government with a crucial lever of control over the print media by restricting the supply of newsprint to anti-government publications.”

Another component of the Mexican media control is the corruption of journalists. Sources of income were their low salaries, commissions from advertising revenues sold by the reporter to their sources and the so-called chayo or monthly cash payments from the government agencies they covered. “Chayos varied from $75 to $1,500 dollars per month, an amount that represented more than the average reporter’s salary, according to Lawson’s research.”
By controlling access to official information, the government rewarded sympathetic papers and punished their dissenters. For example, Lawson accounts that in 1990 a group of independent-minded publications were not allowed to get in and cover an important press conference given by the former president, Carlos Salinas. Among those publications were *El Financiero*, *El Economista*, and *Proceso*.

Authorities also monitored and harassed the dissenters through two social communications areas, one in the Interior Ministry and the other in the Office of the President. In 1991, Jesus Cantu, editor of Monterrey’s *El Porvenir* was forced to resign after the paper published a critical article about former president Carlos Salinas. Many other independent-minded journalists were fired. “Raul Trejo, Benjamin Wong, Manu Dornbrierer, Miguel Angel Granados Chapa, Enrique Quintana, Rene Delgado, and numerous others were all sacrificed by the owners of the news organization for which they worked,” Lawson documents.

Phone calls from officials were also used to “suggest” the angle of stories. Informal and non-written rules drove journalists to self-censorship. When phone calls and suggestions did not work for the officials, indirect pressures caused economic threats for the independent media. For example, tax audits, threats, and overt intervention to the point of closure occurred. Lawson documents several cases: *Diario de Mexico* in 1967; *Voz de Mexico* in 1968; the radical leftist magazine *Por Qué?* in 1974; *ABC* newspaper in 1979; and *Impacto* magazine in 1986.
“One of the most celebrated cases of direct government intervention occurred in July 1976, when President Luis Echeverria orchestrated a coup at *Excelsior* (then Mexico City’s leading newspaper), ejecting Julio Scherer and his team of independent-minded editors. Another significant incident came in the wake of President Jose Lopez-Portillo’s bank nationalization in 1982, when *El Norte* publisher Alejandro Junco was temporarily compelled to leave the country with his family... they represented clear cases of official censorship.”

Despite the official pressure, a handful of independent media survived without government assistance. However, Lawson documents that about 60 Mexican journalists were murdered between 1980 and 1996. Coincidentally, when independent newspapers emerged, the number of journalists murdered also increased. Most of the cases were related to drug traffic investigations, such as the assassination of Mexico City columnist Manuel Buendia.

The “Perfect Dictatorship” was a rent-seeking regime that benefited media businessmen in collusion with the PRI government. Mexico’s political system allowed the presence of independent media during the five decades of media control. However, there was a limit on criticism of the president, controversial topics that might reveal official corruption or electoral fraud. These “remained decidedly off-limits to the press.”
Media coverage under censorship

The result of the Mexico's media control resulted in a "relatively docile and domesticated press." Lawson states three elements in Mexico's newspapers coverage: The official control of the public agenda; a selective silence on issues of particular vulnerability for the government and partisan bias in favor of the PRI during election campaigns. “Although the media in Mexico were never converted into purely propagandistic instruments, coverage under the old regime tended to reflect official priorities. For instance, a content analysis of newspapers showed that headlines consisted of “assertions by prominent members of the political elite.”

Opening Mexico's print media

When did an open media start to emerge? During the last two decades of the twentieth century, Mexico's old system of media control gradually broke down, states Lawson. He attributes this in part to the journalistic practices at independent newspapers as well as the increasing demand for “assertive coverage.” Independent media overcame official censorship and established credibility. Although the papers' audience represented about 10 to 15 percent of Mexicans, opinion leaders and policy decision makers get their news primarily from newspapers and magazines.
Mexico's print media characteristics

Currently, about twenty newspapers are considered the most important media, many of them independent from the government control. They are published in the largest cities such as Mexico City, Monterrey, and Guadalajara.

Most of the papers mentioned below were part of this survey of reporters covering the environment. Diversity in ideology –from a left wing perspective like La Jornada to a right wing perspective like El Heraldo- has remained over time.

About 15 percent of Mexicans get their news from print media. Compared to international standards circulation figures are relatively low. The largest circulations are about 100,000 issues, with an average of 30,000 issues.

In most newspapers, self-reported circulation figures have been questioned because of their high levels. Lawson reports that Mexico had more than 200 newspapers and magazines in the mid-1990s. “In reality, however, only about twenty of these papers and one newsmagazine (Proceso) sold more than 30,000 copies per issue. The rest were essentially ghost publications that survived on government subsidies…”

The larger publications (themselves still rather small by international standards) are concentrated in Mexico City and some provincial cities like Monterrey, Guadalajara, and Merida.
Papers can be divided in three main categories. First, are the county’s independent publications: Reforma (Mexico City), El Norte (Monterrey), La Jornada (Mexico City), El Financiero (Mexico City), El Diario de Yucatan (Merida), Siglo 21 (Guadalajara), El Imparcial (Hermosillo), La Cronica (Mexicali), and Zeta (Tijuana).

A second group included some traditionally pro-government papers: Excelsior (Mexico City), El Informador (Guadalajara), El Occidental (Guadalajara), and Por Esto (Merida).

A third group classified by Lawson are those with a circulation that fell somewhere in between these two categories, such as El Universal (Mexico City) and El Porvenir (Monterrey).

This classification might change over time. For example, El Independiente, an independent paper with a short-term life, was closed after economic and political struggles. Also, Jose Gutierrez Vivo, the most respected journalist in the Mexican radio bought the El Heraldo chain.12

Lawson’s graphic on Independence, Ideology, and Circulation of Mexico City newspapers of 1995-1996 makes an excellent graphical summary. He measured the ideology in a minus-plus 100 scale from the left to the right. In 1995-1996 Mexico’s print media were ideologically diverse, not much different from 2004. In this graphic, the circles at the top tend to be those independent from the government whereas the circles at the bottom tend to be independent. Lawson took into account the agenda setting, assertiveness and partisan posture to measure the independence of the papers.
Figure 1. Independence, Ideology and Circulation of Mexico City newspapers 1995-1996. Source: Building the Fourth Estate by Chappell Lawson
Mexican new law of access to public information

When campaigning for the 2000 Presidential elections, Vicente Fox promised to enact a new law guaranteeing access of public information. In 2002 the Mexican Congress approved a law that left behind the idea that the public information belonged to the government rather to the citizens (Doyle, 2003). For example, a 1999 survey among 100 Mexican journalists showed it was easier for 86 percent of them to obtain information from the government through leaks rather than official means (Hughes, 2002).

Conclusions:

For many years collusion between Mexico's political system and the media has driven a corrupt and censored press. Independent media started to emerge two decades ago due to changing journalistic norms. Assertive reporting promoted increasing readership and greater the market competition among print media. Civil organizations, opposition parties, political scandals, the military and drug trafficking issues were reported. An autocratic government also started to erode because of an economic crisis and increasing population. At the same time, political events such as the loss by the PRI of the presidential elections in 2000 opened a new stage of a country in search for a democracy.
A new law on access to public information enacted in 2003 will help to improve Mexican journalism standards. Different from the past, a new generation of younger journalists are being educated and trained to follow codes of ethics.

Environmental Journalism in Mexico

In 1990, Carlos Martinez conducted interviews with environmental reporters ("Media, Journalism and Environment," 1990). Martinez found that an environmental beat was emerging. The sources of information were scientists, followed by environmentalists, and the government. Reporters acknowledged that there was no follow up on their environmental stories. In addition, reporters expressed doubts that they could improve the quality of environmental reporting.

In 2002 the coordinator of the weekly environmental magazine of La Jornada, Ivan Restrepo, said environmental coverage is not as permanent as the traditional beats. It is seen as a second-tier topic. "It appears generally when social and economical damages have been done." For example, Restrepo explained, fishermen protested the effect on their economic activity of polluted waters discharged from a nearby oil refinery. Restrepo thinks that more investigative reporting is needed within this beat, where reporters still tend to report press conferences and official statements from the government.
Lázaro Ríos, associate director for Reforma newspaper, said in 1996, two years after the paper was launched to the Mexican City market, that the environment is a new field of journalistic specialization. "Whereas political or financial journalism are traditional beats, the environment beat is emerging." Ríos stressed the importance of the reporting specialization for the paper: "We want the leg of the information and the leg of the specialization political, economical or environmental areas to be equally strong." Since its birth in 1994, the newspaper has assigned reporters to cover environmental issues and published a weekly page on environmental issues.

Guillermina Guillén, an environment reporter for El Universal newspaper, thinks the environmental beat is not perceived as important as other areas within the newsroom. However, after five years on the beat, she remains there despite a recent rotation of the staff in the newsroom, due to her specialization on environmental coverage.

Angélica Enciso, an environment reporter for La Jornada newspaper, thinks the beat is important for editors and upper management levels, but not for reporters from traditional beats. In both cases they remain committed to the beat because of their continuing interest. They both agreed that the number of stories they write is larger than the number of stories published by the paper, due to the lack of space for publication.
Literature Review

Environmental journalism contributes to public awareness about environmental problems derived from human activities. According to media agenda-setting theory, environmental coverage is an “unobtrusive” issue because the public gets most of its information about this topic through media, rather than from a personal experience (Zucker, 1978; Atwater, 1985). In addition, agenda-setting theory states that environmental coverage determines the public agenda on this issue. Environmental coverage thus, becomes crucial for informing the public about the environment, and journalists are the professionals behind this coverage.

The Mexican media model has followed the free market American model, with advertisers providing the main source of revenues. Mexican scholars have analyzed the Mexican media model from the cultural hegemony theory due to the geographic proximity and the economic dependence on the United States. “The United States found a fertile soil in Mexico to expand its economy, ideology and culture.” For those independent-minded media, such as the El Norte newspaper, have been influenced by the American free press model.

Shoemaker & Reese (1991) state that content is influenced by internal and external factors. The background and personal experiences of the journalists might affect the content they deliver. For example, gender, education or sexual orientation may influence the content. Media routines, organization, extramedia and ideological levels also influence the content. Shoemaker &
Reese (1991) also state that the environmental journalists have similar limits and constraints -- time, budget and allocation of the news -- determined more by upper management decisions as other journalists.

Fico & Detjen (2000) add that due to the specialization, the environmental reporters have greater influence on the topics, sources and angles of the stories.

According to Becker et al. (2000), the role of the beat structure organization in the newsroom is determined in part, by newspaper size. Becker et al. explain that past research has shown that structural differentiation occurs with the increasing size of a medium (Blau & Schoenherr, 1971). Thus, size affects the number of departments, sections, hierarchic levels, and the degree of role specialization. In addition, Becker et al. state that besides the size "other determinants are the environment within which the organization operates and its reliance on technology... It is possible that beat structure in newsrooms is simply a form of job differentiation, and that this differentiation increases as newsrooms become larger." This study, examined whether the newspaper size is directly related to the amount of environmental coverage from the Mexican journalists perspective.

The field of environmental journalism education in the United States has also grown along with environmental journalism. In 1994, Fredman found 6 out of 105 courses on environmental writing on the 1978 edition of the Directory of Science Communication Courses and Programs. Ecological events, such as droughts “drew American interest to the environment.”
In Mexico, ecological communication began to be part of academic publications and specialized magazines in the 1970s, due to the increased concern about the impact of the environmental problems on society (Ramirez, 1992). “It is in the early 70s that environmental issues linked to political consequences started to disseminate on the media.”

Profiles of environmental reporters and main newsroom trends have been studied through a variety of surveys over the past three decades. In 1972, William Witt received 62 responses from 95 environmental reporters in newspapers nationwide (Witt, 1974). Witt describes a general profile: the typical environmental journalist was a 31 to 40 year-old male with a bachelor's degree in journalism and no science background. These reporters covered mainly topics such as the ongoing pollution problems and their sources were primarily conservation organizations, government, and business. Slightly less than half of his respondents had the position of environmental reporter. One-third of the respondents spent all of their time writing environmental stories.

In 1993, a study on the state of the environmental reporting by American Opinion Research concluded that environmental reporting was on the rise. A survey was administered to 512 print and broadcast U.S. journalists around the country (“The Press and the Environment: How Journalists Evaluate Environmental Reporting,” 1993). The study found that half of the newspapers had a reporter assigned to cover the environment. These tended to be larger newspapers. For most reporters, the environment was not their primary beat. A
large number were general assignment reporters. Reporters working for larger newspapers spend less than half of their time covering the environment.

In 1995, MGA/Thompson conducted a survey for Duquesne University (Environmental Journalism Survey, 1995). The study of 224 environmental reporters throughout the U.S. found that respondents perceived that there was little media coverage of environmental issues. Academics, scientific journals, and government were their more credible sources of information.

Detjen et al. (2000) conducted a survey among environmental journalists in the U.S. Nearly half of the reporters surveyed spend more than half of their time on the environmental beat whereas “only a third spend more than 75 percent of their time on the beat.” A trend of less time spent on the environmental beat compared to previous years was also found. Lack of resources and lack of time were described as two problems that the United States environmental reporters face.

A more recent study conducted among 55 environment reporters in New England (Sachsman et al. 2002) defined the environmental journalism specialization as “those journalists who, because of their expertise, their experience, or their willingness, regularly write about environmental issues or cover the environmental beat”. Only about one-third of this group said they had an environmental journalists job title. “One reason for the varied titles may be that these reporters often have duties that go far beyond covering the environment.” For Detjen et al. (2000) these results are consistent with findings in past studies where “…relatively few of these reporters cover environmental issues
exclusively. “Environmental journalists in Mexico may face similar constrains. The environmental beat, this is the one that allows a reporter to work full time on environmental issues, might exist in few newsrooms.
Chapter 2
Research Questions

The objective of this thesis is first, to describe personal and professional demographic characteristics of the Mexican newspaper reporters and to find out what are basic newsroom patterns performed on a daily basis. The second objective is to compare some of the results of this survey with those of the American environmental journalists (Detjen et al., 2000).

Past research have answered the question of who are the American journalists. In 1982, and a decade after in 1992, Weaver and Cleveland conducted a study to respond this question. In 1992, they reported that the "typical U.S. journalist is a white Protestant male who has a bachelor’s degree from a public college, is married, 36 years old." Those studies have provided knowledge about who are the news professionals.21

Moreover, other studies have described personal and professional characteristics of the U.S. environmental journalists (Witt, 1974; Detjen et al., 2000; Sachsman et al., 2002). The research questions of this study stemmed from the Weaver and Cleveland (1982) and Detjen et al. (2000) questionnaire. The answers will attempt to provide the first descriptive study of who are the Mexican environmental journalists. The research questions include:

1. What are the gender, age, and marital status of these Mexican environmental reporters?
2. What is their educational background?

3. How much experience do they have in journalism? How much experience do they have in environmental journalism?

4. What percentage of their time do they spend writing about environment?

5. How many articles did they write over a year?

6. What are the topics they covered the most?

7. What are the main problems they face in environmental reporting?

8. What are the sources they obtain information from?

9. What is the section they work for within the newsroom?

10. How many workshops for journalists on environmental issues did they attend in the past five years?

11. What are their salaries?

12. Are they affiliated with a professional association? If not, what are the reasons they expressed?

13. What is the environmental reporters geographical distribution?

14. Are there similar characteristics between Mexican and American environmental journalists? What are some differences?

15. Open question. Comment about environmental journalism in Mexico.
Hypotheses

Previous research shows that the size of a medium is a factor in the structure of a newsroom's organization.²² An objective of this research is to find out if the size of the paper influences Mexican environmental reporters newsroom patterns. According to the Editors & Publishers International Yearbook 2001, the circulation of Mexican papers ranges from 20,000 to 373,600.

Traditionally, larger newspapers have assigned an environmental or science reporter because they might allocate more resources to news coverage.²³ In 1994, Friedman wrote that: “Half of the newspapers, mostly larger ones had specifically assigned a reporter to cover the environment,” based upon a 1993 survey by American Opinion Research for the Foundation for American Communications (FACS).²⁴ For this study, a similar trend was expected for Mexican environmental journalists. Past research has reported a moderate correlation between size and the number of stories.²⁵

Hypothesis 1 examines the relationship between the newspaper and the environmental reporting training, the time invested on the topic and the number of environmental stories produced. The independent variable “newspaper” is defined as the size of the newspaper’s circulation. It is measured in a ratio level as the circulation size. The dependent variable “training” is defined as the attendance at workshops on environmental journalism; it is measured in an ordinal level: None, 1 to 5, 6 to 10, 11 to 15. The dependent variable “time spent”
is defined as the time the reporter invests writing environmental stories; it is measured in an ordinal level: less than 25%, 26 to 50%, 51 to 75%, 76 to 100%.

The dependent variable “environmental story” is defined as news relating to mankind’s effect on the environment and ecosystem. It is measured in an ordinal level divided into four categories: 1-20, 21-50, 51-100, and more than 100.

Hypothesis 2 examines the correlation between the independent variable “training” and the dependent variable “time spent” on environmental reporting and environmental stories produced. More important than a science background, training might play a critical role for the specialization on environmental reporting.26

Hypothesis 3 examines the association between the environmental stories output and the reporter’s experience in covering the environment.
The hypotheses are as follows:

H1: The larger the newspaper, the more training reporters will have on environmental journalism, the more time reporters will spend on environmental stories, and the more environmental stories the newspaper will publish.

H2: The more environmental training reporters have, the more time reporters spend on environmental stories and the more environmental stories the newspaper will publish.

H3: The more experience environmental reporters have on the beat, the more environmental stories they will produce.
Method

Population

The population for the study was journalists who cover environmental news in Mexican newspapers. A survey was the method selected for this study. Since there is no database of the environmental journalists in Mexico, a census was created from the *Editor and Publisher International Year Book 2001*. To test the hypotheses of the study, papers were selected from the largest to the smallest circulation sizes. Figures not found for the circulation size in the Editor and Publisher were complemented through the *Print Media* quarterly directory (2002 Mexican Advertising Media).

In this study, environmental journalists are defined as journalists who are most likely to “gather news relating to mankind’s effect on the environment and ecosystem.” Generally speaking, the concept of environmental journalist is not commonly used within the Mexican newsrooms. By asking for those reporters most likely to cover ecology or the environment, this limitation was sorted out. The list of Mexican environmental journalists includes the names of the reporters, their telephone numbers, mailing address and their email addresses.
Three-stage Sampling Plan

Based on the Three-stage Sampling Plan of Weaver\textsuperscript{28}, a sample of 9\% (50 newspapers) from a list of 553 papers published on the \textit{Editor and Publisher International Year Book 2001} was drawn. In order to get information not reported in the \textit{Editor and Publisher Yearbook} the \textit{Print Media Directory 2002} of Mexico was also used.

The second step was to obtain a list of environmental journalists for the organization in the sample. Phone calls were made to all editors in chief or news directors of all the sample organizations, explaining the study and requesting the name of the reporter most likely to cover the environment on their staff.\textsuperscript{29}

Finally, a sample of 70 environmental journalists was gathered. Fifty-nine journalists responded (84 percent response rate).

Procedure

An e-mail and telephone survey was selected as the study method. A questionnaire of 24 closed-ended questions and one open question were designed. Originally, the e-mail questionnaire was first selected as the main mean of communication, but when the researchers noticed the low rate of the response, the telephone survey was used to solve the problem. All of the 70 reporters received a letter sent through e-mail. The letter introduces the survey objectives and asks for participation. The challenge the researchers faced was to
get them to respond to the questionnaire in a timely manner. So, for each reporter, two or three phone calls were often required. The responses were gathered from February to October 2003. The session to conduct the survey over the phone lasted an average of 30 minutes each.

**Questionnaire Formation**

*Questions were designed to look at the following points:*

1. Personal demographic characteristics
   
   What are their personal demographic characteristics? What is the proportion of men and women? What are their ages? What marital status do they have?

2. Newsroom patterns
   
   What are their newsroom patterns? Questions related to experience, time spent, environmental stories produced, topics and problems they faced.

3. Education background
   
   Field of study and level of education were designed to describe what type of studies the environmental reporters have. Also, we sought to find out if there is a relationship between the field of education and their specialization on the environment.
4. Professional trends

Are these journalists part of a professional association? If not, what are their reasons? Do they attend environmental journalism workshops?

The questions were designed, first, to describe characteristics and newsroom trends of the Mexican environmental journalists. Other questions are related as possible factors in their specialization on environmental reporting.

For example, what causes them to specialize in the field? Is it the time spent? Is it the experience? Is it the training? Is it a combination of them?

In addition, the questionnaire was also designed to be able to compare the results with those from an American environmental journalists survey conducted by Jim Detjen and Fred Fico of the School of Journalism at Michigan State University in 2000. For example, what do the American and Mexican environmental journalists have in common?

Data obtained from the sample were analyzed through the SPSS program. The Research Questions’ results were presented in frequency and percent values. The hypotheses were analyzed based on Pearson’s r correlation.
Chapter 3
Results and Discussion

Among the sample of 70 environmental journalists, 11 did not respond. Of the 59 that were successfully reached, a total of 18 responses were collected from e-mail (30 per cent response rate). Thirty-four respondents out of 59 journalists who participated in the phone survey responded to the open question (58 percent response rate).

Research Question 1

What are the gender, age, and marital status of these reporters?

The largest number of responses came from reporters (88 percent). Twelve percent were copy editors. The youngest journalist was 23 years old, and the oldest 51. The average respondent was 35 years old. Fifty nine percent were men and 41 percent women. Twenty-four respondents were married (41 percent), and about 42 percent were never married.

Research Question 2

What is their educational background?
About 80 percent of the respondents received a bachelor's degree. Sixty percent studied communication sciences, which includes journalism. Ten percent had high school as their maximum level of studies. Five per cent have a master’s degree. Other fields of study include political science, law, and business administration.

Research Question 3

*How much experience do they have in journalism? How much in environmental journalism?*

About 50 percent of respondents had between one and five years of experience writing environmental stories. Five respondents had 10 years or more of experience.

Research Question 4

*What percentage of their time do they spend writing about environment?*

Seven percent of respondents spent more than three quarters of their time on environmental stories. About 20 percent of respondents spent from half to three quarters of their time on environmental stories. Forty-one percent of respondents spent from a quarter to half of their time writing environmental
stories. Thirty-four of respondents spent less than a quarter of their time on environmental stories.

**Time spent on environmental articles**

- 76-100%: 41%
- 51-75%: 19%
- 26-50%: 40%
- less than 25%: 7%

Figure 2. Time spent on environmental articles

**Research Question 5**

*How many environmental stories did they write during a year?*

About 30 percent of respondents wrote more than 100 environmental stories over a year. One fourth of respondents wrote between 50 and 100. Twenty percent of the respondents produced between 20 and 50 environmental stories. Another 20 percent of respondents wrote between 10 and 20 environmental stories.
Research Question 6

What are the topics they covered the most?

Forty-two percent of the respondents reported on water issues. Fifteen percent of respondents wrote on garbage issues. Ten percent reported on health and another 10 percent on air pollution. Seven percent reported on toxic wastes, followed by five percent who reported on forest issues.

Topics covered

- health
- fishery
- law and environment
- toxics
- urban development
- air pollution
- climate change
- forest
- water
- garbage

Figure 3. Topics covered.
Research Question 7

What are the main problems they face in environmental reporting?

One fourth of respondents reported that no access to public information was the main problem they face. Fifteen percent of the respondents reported the lack of resources. Fourteen percent said that the lack of information is their main problem. Other fourteen percent of the respondents reported the lack of space to publish their stories. Ten percent said that the difficulty to find reliable information was the main problem they face.

Problems reporters face

Figure 4. Problems reporters face.
Research Question 8

What are the sources they obtain information from?

Respondents were asked to select the frequency with which they used government, industry, academic, and non-profit organizations as sources. Government was reported as the source of information used the most regularly. Answers were measured through three scales from "never" (1 point) to regularly (3 points). Eighty percent of the respondents used government regularly, and 20 percent used it sometimes. About sixty percent of respondents used non-profit organizations regularly. Almost half of respondents used academic sources frequently. Less than 20 percent used industry sources regularly. Surprisingly, about 40 percent of respondents used academic sources sometimes and 15 percent reported never using academic sources.

Research Question 9

What is the section they work for within the newsroom?

Fifty-six percent of respondents worked for the local section. Twelve percent worked for the environment section. Seven percent worked for the agricultural section. Five percent of respondents worked for the national section, and the other five percent for the society section. An additional 14 percent
worked for different sections, such as education, health, culture, and legislature.

About 90 percent of respondents reported that they were assigned to a variety of beats, including the environment.

Section in the newspaper where you work

![Pie chart showing section in the newspaper where reporters work]

Figure 5. Section in the newspaper where reporters work.

Research Question 10

How many workshops for journalists on environmental issues did they attend in the past five years?

About 50 percent of respondents had never attended an environmental journalism workshop. Another 44 percent attended between one and five
workshops on this topic. Five percent attended from six to 10 workshops, and two percent attended between 11 and 15 workshops on environmental reporting.

Research Question 11

What are their salaries?

Traditionally, the salaries of Mexican journalists have been low (Torres, 1999). About a third of the respondents earned less than $4,000 annually. Another third of the respondents earned between $4,000 and $8,000, and the final third of the respondents earned between $9,000 and $12,000 annually. Five percent of respondents earned between $13,000 and $16,000. Another five percent of respondents earned between $17,000 and $20,000. Two percent of respondents earned more than $20,000 annually. This study excludes a comparison with American journalists salaries, due to the economic differences between Mexico and the United States.

Research Question 12

Are they affiliated with a professional association? If not, what are the reasons they expressed?

Less than 30 percent of the respondents knew of any association related to environmental journalism. Fourteen percent of respondents did not trust
associations. Ten percent reported to be interested in being a member of an association, but did not know how to get involved. Nine percent of the respondents said that being a member of an association would affect their job.

Research Question 13

What is the geographical distribution of the environmental reporters?

For this study, Mexico was divided into five geographical areas: Center, North, South, Gulf and Pacific slopes. One fourth of the respondents worked for Mexico City newspapers. About 40 percent of newspapers were located in the Center slope: Mexico City, Guanajuato, Morelos, Puebla, San Luis Potosi, and the State of Mexico. About 30 percent of the newspapers were located in the North slope: Baja California, Coahuila, Chihuahua, and Nuevo Leon. The Pacific area (almost 12 percent) includes Jalisco, Michoacan and Guerrero, followed by the Gulf area (10 percent), which includes Tabasco and Tamaulipas. About five percent of the newspapers were located in the Southern region: Campeche and Yucatan (See Appendix C).

Research Question 14

What similarities and different characteristics are there between Mexican and American environmental journalists?
In order to be able to compare Mexican and American environmental journalists, the author previously selected characteristics and newsroom trends from the Detjen et al (2000) study to design the questionnaire of this research.

Personal characteristics

The gender proportion is similar in both studies. Fifty-nine percent of Mexican environmental reporters were male and 41 percent were female. Detjen et al (2000) found that “sixty-four percent of respondents were male and 36 percent were female.” For Americans, the average age was 40, for Mexicans, the average age was 35. Mexican ages ranked from 23 to 51 years old.

Educational background

American environmental journalists have higher levels of education. About 94 percent of American environmental journalists had a college degree, and one third had completed a master’s degree. In contrast, almost 60 percent of Mexican journalists had earned a bachelor’s degree. Ten percent had high school as a maximum level of study. Five percent earned a master’s degree. The most common major for both groups was journalism. Fifty-eight percent of Mexican journalists studied journalism; seven percent studied political science. Thirty-four percent studied law, economy, business administration and computer sciences.
Twenty-seven percent of American journalists majored in journalism, and 17 percent in English.

American journalists received more training. About 44 percent of Mexican respondents had attended between one and five workshops on environmental journalism. In contrast, almost 70 percent of the American newspaper environmental reporters had attended at least one workshop.

Newsroom trends

-Time spent

American journalists spent more time on environmental coverage. Only seven percent of Mexican reporters spent more than 75 percent of their time on the environment. In contrast, a third of American environmental reporters spent more than 75 percent of their time on the environment beat.

-Story output

The responses were divided into four categories, ranging from 1 to 20 articles in the first category to more than 100 in the fourth category. Twenty-nine percent of Mexican reporters produced more than 100 environmental stories over a year. Similarly, 28 percent of American newspaper environmental reporters produced more than 100 stories on the beat over a year.

-Experience
Fifty percent of Mexican environmental journalists had between one and five years of experience writing environmental stories. Similarly, nearly 40 percent of environmental reporters in the United States had worked on that beat for less than five years.

-Problems of environmental reporters

Twenty-five percent of Mexican reporters reported that no access to public information was the main problem they faced, followed by 14 percent who reported lack of information as their main problem. In comparison, 40 percent of the American reporters said the lack of resources for research and travel were the main problems they faced.

-Topics of environmental stories

Forty-two percent of Mexican reporters said water was the topic they covered the most over a year. Fifteen percent reported garbage problems as the topic covered the most. In the United States water and air pollution were most likely to be covered than any other topic.

15. Open question. Comment about environmental journalism in Mexico.

Fifty-two percent of the 59 environmental journalists responded to the open question. One fourth of them perceived little interest by the media in environmental journalism. Lack of space, the low priority of the environmental
beat, little interest from editors, and the lack of quality of the environmental stories were aspects pointed out. Some reporters perceived that rotation from one beat to another made it difficult to develop a specialization. A common explanation from editors is that rotation from one beat to another is done to prevent reporters from creating too close relationships and interests with their sources of information. A reporter said that the environmental stories have had no impact on the governmental and public agenda. Personal willingness and commitment from the reporters have been important factors to overcome the problems they face.

About ten percent perceived that there is little interest in the topic by the government. “Government don’t make industry comply with environmental regulations because they generate jobs,” said one of the respondents. Another respondent said that environmental problems remain unattended or minimized. “It hurts that the government doesn’t do specific things for the environment. In Mexicali, we have severe problems because of the garbage in the west part, the pollution of the Rio Nuevo, the agricultural fields polluted with agrochemicals, the air pollution that affects our health.”

Environmental education and the promotion of an ecological culture need to be strengthened among the public. About five percent of respondents perceived that the environment is not important for the public.

Six percent of the respondents perceived that access to accurate public information is an issue for them. One reporter said that the public information obtained from the government is not reliable. Another said that the information is
not updated. In another case, a reporter said that it is very difficult to reach federal authorities.

Nine percent of Mexican environmental journalists said that environmental reporting is new that the beat is growing, but “there is a long way to go.” Two reporters think that environmental journalism in Mexico “does not exist within the media. It is the ecological awareness of the reporters their motivation behind environmental stories”. Five percent said that training is important for them to improve the quality of their reporting.
This study found that for this population no relationship exists between the size of the newspaper and the output of environmental stories; that there is a weak direct correlation between the larger papers and the time spent on the beat; and a moderate correlation between larger papers and training. The results suggest that larger newspapers tend to train more reporters, and as a result of this training, the time spent and output of environmental stories might tend to increase. A weak correlation between the experience covering environmental stories and the output of environmental stories was also found.

(H2)  
Journalist Training  
(np=.13)  
+ weak  

(H1) NP (np=.39) moderate +  
Circulation  
(np=.10) weak +  
Time spent (np=-.18) no relationship  
E. stories  

(H3) (np=.05) weak +  
Journalist Experience
Hypothesis 1

The larger the newspaper, the more environmental stories

The hypothesis was not supported. There is no a relationship between the circulation size and the number of environmental stories produced. Pearson's r value showed a negative correlation. The value of -0.18 is not statistically significant.

The larger the newspaper, the more time spent

The hypothesis was supported. Pearson's r correlation of .10 shows however, a weak positive relationship between the size circulation and the time spent writing environmental stories.

The larger the newspaper, the more training

The hypothesis was supported. A Pearson's r correlation of .39 showed a moderate relationship between the size of the medium and the number of workshops attended.
Hypothesis 2

The more training, the more time spent on environmental stories

The hypothesis was supported. A Pearson’s r correlation of .50 shows a strong relationship between the number of workshops attended and the time spent writing environmental stories.

The more training, the more environmental stories

The hypothesis was supported. A Pearson’s r correlation value of .13 shows that there is a no significant relationship between the training and the number of stories produced.

Hypothesis 3

The more experience, the more environmental stories

The hypothesis was supported. A Pearson’s r correlation of .05 shows a not significant positive relationship between the experience and the number of environmental stories produced.
Chapter 4

Summary and Conclusions

This study was designed to describe the characteristics of environmental journalists in Mexican newspapers. An e-mail and phone survey was conducted with a sample of 70 environmental journalists at 50 newspapers located at 15 of the 32 states of Mexico. A total of 59 respondents (84 percent rate) were used for this research.

Limitations

This study was limited to describing the profile of reporters most likely to cover environmental news in Mexican newspapers. Future research could focus on other type of media, such as radio, television, magazines and Internet.

Although this study found no direct relationship between the paper's size and the output of environmental stories from the reporter's perspective, a content analysis might complement this study.

The study method, an e-mail survey, may also have limitations in terms of its efficiency. Despite more than four follow-up emails during a period of three months, 70 percent of journalists did not respond to the questionnaire through this mean of communication. The researcher had to make a large number of phone calls, -approximately 200 phone calls- in order to increase the response rate.
In addition, this research focused on the quantity of environmental stories written by Mexican environmental journalists. A future research might focus on the reporter’s perception on the quality of environmental reporting.

Suggestions for future studies

This research described personal, educational and professional characteristics of Mexican environmental journalists working for newspapers. In addition, this study described the relationship between the size of the newspaper and the reporters’ perception of output and time spent on environmental stories as well as train on environmental journalism. Also, this research found similarities between American and Mexican environmental journalists.

One of the problems that Mexican environmental journalists face is the lack of access to public information. In June 2003, the Mexican Federal Law on Transparency and Access to Public Information came into effect. A future research might look at the impact of this law on the access of public environmental information, and the output of environmental stories.

Topics of environmental stories varied according to the geographical situation and local issues. A classification of the type of topics was not considered in this study. A future research might focus on content analysis based on the type of environmental topics covered by Mexican media.
Conclusions

Consistent with the message mediation theory, Mexican environmental journalists face similar limitations and constraints, such as time, allocation of their stories and budget, which are decided by editors and supervisors.

The average age for this group is 35. Almost 60 percent of the reporters are male. Figures show that the age rank is wide, from 23 to 51. Only seven percent spent more than three quarters of their time writing environmental articles. One fourth wrote between 75 and 100 articles over a year. In general, the reporter is hired to report about three or four beats, including the environment. About 40 percent wrote about water, garbage, air pollution and health; and water was the topic most covered. Fifty percent had between one and five years of experience in environmental reporting.

About 60 percent earned a bachelor’s degree in journalism, whereas 10 per cent had high school as a maximum level of study. The majority of Mexican environmental reporters studied communications in college. None had an undergraduate background in science. Only two reporters had a master’s degree in environmental engineering. These results are consistent with U.S. newsrooms, where expertise in a sense of formal education seems not to be a “key element to beat assignment.”

Little interest in being part of an association was shown by Mexican journalists. Less than 30 per cent knew of any association in their field, and about one fifth don’t trust in professional organizations.
Half of the reporters had not taken any workshop on environmental reporting, whereas the other half have attended from one to five training sessions on this field.

One fourth perceived the lack of access to public information as the main problem they face. About one fifth think it is lack of information. Ten percent said they have problems finding reliable information, whereas 13 percent said they struggle in finding balanced information.

Despite the perception that Mexican environmental journalists face little access to public information, the government was the source used more frequently.

In terms of newspaper size the author divided small newspapers as those with a circulation between 20,000 and 54,000, and large with a circulation between 60,000 and 373,6000.

A similar proportion between small and large newspapers for the environmental stories output was found. For example, 28 percent of small newspaper environmental reporters wrote more than a 100 articles over a year. Similarly, twenty-nine percent of large newspaper environmental reporters produced the same number of stories.

Environmental journalism is a specialization growing in Mexico. Previous research shows that environmental journalism, as a specialized beat within the American newsrooms, wasn't recognized until the late 1960s. Since then, many newspapers have created the position of full-time environmental reporter. In comparison, a handful of Mexican newspapers have currently this position.
The proportion of Mexican men and women who are environmental reporters is similar to American environmental journalists, about 60 percent male versus 40 percent female.

Detjen et al (2000) study found that a third of American environmental journalists spend more than 75 percent of their time on the environmental beat. In contrast, Mexican environmental journalists spend less than 10 percent of their time on environmental stories. As a result, American environmental reporters should have produced more stories than Mexicans. However, this study found that 28 percent of American environmental journalists produced the same number of articles (more than 100 stories over a year) as Mexican environmental reporters.

Environmental journalists in Mexico and in the United States share similar problems, such as lack of time and lack of space. But for Mexican environmental journalists lack of access to public information was the main problem they faced.

Since Mexican journalists do not usually have an educational background in science, experience, time spent on environmental reporting and training are important factors of specialization for this group. A Mexican environmental journalist said to the researcher that will and personal interest in environmental issues were important factors in covering environmental news, regardless of the beat they are assigned to by their supervisors.
Journalists as the publisher of *El Diario de Juarez*, Ivan Restrepo, coordinator of *La Jornada Ecologica* and researchers from the University of Colima gathered to discuss the importance of the environmental journalism. Another recommendation was to promote investigative reporting in this new field and go beyond the official declaration. The conference was reported on the *Mexican Journal of Communication*.

(Chapell 2002), (Doyle 2003).


Ibid. p.5

Ibid. p.13

Ibid. p. 29

Ibid. p. 28

Ibid. p. 44

Ibid. p48

Ibid. p. 62.

The reporter covering the environment for El Heraldo in San Luis Potosi told the author he didn't know if the new owner would also keep the staff.

Interview conducted by phone in Mexico City in August 12, 2002. Ivan Restrepo is the coordinator of the weekly Magazine *Jomada Ecologica* published since 1991 by *La Jornada*. He is a writer on environmental issues for La Jornada. Restrepo is a specialist in economical agriculture and director and researcher of the Center of Ecology and Development, an independent environmental organization; *La Jornada* is considered a liberal newspaper.


Interviewed by the author in Mexico City in August 2002.

Interviewed by the author in Mexico City in August 2002.


Michigan State University emeritus professor Mary Gardner trained Mexican young journalists for the EI Norte newspaper in the 1980s.


Lee Becker et al., "Why does the beat go on?" Newspaper Research Journal, 21:4 (2000): 2-16. Becker challenges the common finding that increasing the size influences the structural differentiation within a news organization. Becker et al found that an increased number of beats is related more to the geographical, rather than a subject differentiation. This study aims at finding the extent of environmental coverage between large and small newspapers.


Sharon M. Friedman, op. cit.: 1.


Jim Detjen, "Environment News: Where is it going?" The Alfred and Julia Hill Lecture series on science, society and the mass media, (1995). Detjen wrote that environmental journalism training is very important for journalists to better communicate the environmental issues.

The author used the concept of environmental journalist of Tony Atwater's study on environmental journalism in the United States. The same concept will be used for environmental story.


This research received the approval of the University Committee on Research Involving Human Subjects' (UCRIHS) at Michigan State University from January 2, 2003 to December 2, 2003. A renewal was approved in January 2004 (IRB# 02-983).

The geographical distribution is based on the book: Mexican History Mexico City, El Colegio de Mexico, (2000).


Cite from an open question of this study.

Becker, op. cit.
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Editor and Publisher International Year Book. (2001).


APPENDICES
Appendix A

Request Cover Letter

Dear Journalist:

Thank you for taking the time to fill out this survey. I am Susana Guzman, a journalism master’s student at Michigan State University. I am doing my master’s thesis on a “Portrait of the environmental journalists in Mexican newspapers.”

In order to get a better understanding of environmental journalism in Mexico, this study aims to find out information about the reporters covering the environmental issues in the largest Mexican newspapers. Knowing the problems and challenges that environmental journalists face in a daily basis will allows researchers to find out ways to improve the environmental reporting in Mexico.

The questionnaire contains by 25 questions. Responding to the questionnaire will take about 25 minutes. Your answers will remain confidential. You may refuse to answer any specific survey questions, if you choose to. Data gathered for this survey will be reported only in the aggregate so the journalists will not be identified or associated with the data collected.

Your participation in this study is voluntary. Please be assured that your responses will remain confidential and will not be used for any other purpose than this study. Neither you nor your newspaper will ever be specifically identified in reports about this study. Please know that completing the questions and submitting them will be tantamount to consent to helping with this study.

In case you have questions or concerns about your rights as a research participant, you can contact Ashir Kumar, Michigan State University’s Chair of University Committee on Research Involving Human Subjects at (517) 355-2180, or through e-mail at UCRIHS@msu.edu or through mail at UCRIHS, 202 Olds hall, Michigan State University, East Lansing, MI 48824 – 01046, U.S.A.

Again, I appreciate your time and your understanding about my endeavor. I would appreciate it if you would complete and return the questionnaire to me at guzmans1@msu.edu by February 28, 2003.

Thank you.

Sincerely,

Susana Guzman
Appendix B

E-mail and phone survey on Mexican Newspapers' Environmental Journalists

QUESTIONNAIRE:

NEWSROOM

1. Name of the newspaper you work for: ____________________________

2. Position: (Please, check)
   Reporter____
   Editor____

3. In what year did you begin working for this news organization?_______

4. How many years have you worked in environmental coverage?_______

5. If editor, what percentage of your time do you spend writing about
   environment? (Please check)
   Less than 25%_____  26 to 50%_____  51 to 75%_____  76 to 100%_____  

6. If reporter, what percentage of your time do you spend writing about
   environment? (Please check)
   Less than 25%_____  26 to 50%_____  51 to 75%_____  76 to 100%_____  

7. What is/are the beat you work for within the newsroom? (If necessary, please
   rank them in order with 1 being the beat you work most, 2 being the beat you
   work second most frequently, etc.)
   Local____
   National____
   Agriculture____
   Science____
   Society____
   Health____
   Environment/Ecology
   Other (Please specify)____

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8. How many articles about environmental issues did you write in 2002? (Please check)

None____; 1 to 5____; 6 to 10____; 11 to 20____; 21 to 50____; 51 to 100____; more than 100____;

9. What are the sources you obtain information from? (Please check)

Environmental groups: Never____; Sometimes____; Often____
Government agencies: Never____; Sometimes____; Often____
Business and industry: Never____; Sometimes____; Often____
Academy: Never____; Sometimes____; Often____
Other media: Never____; Sometimes____; Often____

10. Choose the five topics you covered most heavily in 2002 and rank them in order with 1 being the topic you covered most, 2 being the topic you covered second most frequently, etc.

Air pollution____
Biodiversity____
Climate change____
Endangered animals____
Energy issues____
Defense issues____
Fishing issues____
Forestry____
Land use____
Legislative or regulatory issues____
Natural disasters____
Hazardous wastes____
International issues____
Nuclear power____
Pesticides____
Population____
Recycling____
Solid waste issues____
Sustainable development____
Urban development____
Water issues____
Wetlands____
Wildlife issues____
Other (Please specify)____
11. Regardless of the environmental topics you have covered, what in your opinion are the most important environmental problems in Mexico? (You may want to either use the list in question 10 or add a topic that has not been considered). Please, list no more than five topics.

12. What are the main problems you face in environmental reporting? (Please rank them from the most to the least, if necessary).

- No access to information
- Lack of information
- Lack of time
- Lack of resources for research and travel
- Lack of communication with scientists
- Lack of space to publish the stories
- Difficulty in finding reliable sources
- Pressure from industry
- Pressure from government
- Low salary or compensation
- Difficulty in finding unbiased sources
- Other (Please specify)

13. Are you affiliated with a professional association? (Please check)

- Yes
- No

If yes, please specify which one

If not, please select the reasons you are not part of a professional association

- I do not know any professional association in my field
- It might affect my job position
- I do not trust professional associations
- I am interested but I do not know how to get involved in a professional association
- Other (Please specify)

14. How do you get informed about the daily news (including environmental news) besides the newspaper at which you work? (Please specify the name of the medium or program and if it is local or national).

- Local
- National
- Newspapers
- Television newscasts
- Political issues magazine
- On-line newspapers
Radio
Other (Please specify)

BACKGROUND

15. Highest educational level completed (Please check)
High School ; Bachelors ; Masters ;
PhD ; Other (Please specify) ;

16. Undergraduate major (Please check)
Journalism ; Political Science ; Science ; History ;
Economics ; Psychology ;
Other (Please specify) ;

17. Where did you study your bachelor's degree? (Please check)
Public School ; Private School ;
Please, specify the name of the School ;

18. How many years have you worked in journalism?

19. How many workshops for journalists on environmental issues have you attended in the past five years? (Please check)
None ; 1 to 5 ; 6 to 10 ; 11 to 15 ; More than 15 ;

20. What type of environmental journalism training have you received? (Please check)
None ; College course ; Workshop ;

DEMOGRAPHIC

21. Where were you born?

22. How old are you?

23. Gender: (Please check) Male ; Female ;
24. Marital status: (Please check) Married_____; Single_____; Other_____

25. Which category best represents your annual salary in dollars? (Please check)

Less than $4,000 (US)_____; $4,000 to $8,000_____; $9,000 to $12,000_____; $13,000 to $16,000_____; $17,000 to $20,000_____; More than $20,000_____;

26. Do you want to make a short comment about the environmental journalism in Mexico?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

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Appendix C. Geographical distribution of environmental journalists in Mexico.

1. Aguascalientes
2. Baja California
3. Campeche
4. Coahuila
5. Chihuahua
6. Distrito Federal
7. Guanajuato
8. Guerrero
9. Jalisco
10. Estado de Mexico
11. Michoacan
12. Morelos
13. Nuevo Leon
14. Puebla
15. San Luis Potosi
16. Tabasco
17. Tamaulipas
18. Yucatan