Underwriting TRENDS

Underwriting Section Quarterly

Vol. 14 No. 4
December 2002

Tidbits from the Top

by Frederick R. Parcells, CPCU, ARM, ARe

Season's Greetings to All!

Your committee has just returned from the energizing CPCU Society's Annual Meeting and Seminars. We sponsored seminars on mold and underwriting training and left feeling invigorated, if not a little sunburned and lighter in the wallet from Orlando's many tourist attractions. We heard music to all our ears—that companies are returning to emphasizing underwriting (from Bill Tarbell of Providence Washington) and that specific underwriting training is improving the bottom line and positioning carriers for future success (from Bob Fishman of Zurich). We're already excited about next year's events!

Topics will include:

1. Catastrophes—natural and man-made
2. Cat Modeling
3. How to Access the E&S Market
4. Underwriting of Undocumented Workers (designed for local chapter use)

Here's how you can help. Do you know someone who is highly knowledgeable in one of these topics? Are **you** an expert perhaps? If you'd like to recommend a colleague for consideration as a panelist, drop me an e-mail at fparcells@apexamerican.com or give me a call at (312) 930-9726. ■

When All Hail Breaks Loose

by Lynne Lawry and E. DeWayne Mitchell

Editor's Notes: *Recent discussions, writings, and seminars regarding emerging trends, especially mold, has created considerable interest in understanding variables that impact our operations' bottom line. Underwriters of the future will need to have a much broader understanding of the business and market factors impacting results. How do you underwrite against mold, terrorism, or hail? All have certainly impacted companies' bottom line. Since much has already been written on mold and terrorism, I had asked Lynne Lawry, vice president of Nimbus who specializes in weather solutions, to provide some insight on hail trends. I hope the article provides you with some insights and better understanding of hail and the impact on companies' bottom line.*

When hail occurs, losses amass and adjusters go to work determining the extent of damage and the coverage afforded to the property owner under his or her policy. Often the claim settlement is complicated by pre-existing conditions, prior hail events, availability of accurate hail verification data, and "neighboritis" syndrome (i.e. my neighbors' insurance carrier replaced their roof, etc.). To understand the issues surrounding validation of hail claims, Weather Decision Technologies, Inc. (WDT), a Norman, Oklahoma-based weather company, conducted a survey of claims professionals to determine current methodologies and needs for future development of hail verification tools.

More than 3,500 claims professionals were invited to participate and 223 completed an online Internet survey. The survey participants represent insurance carriers (87 percent), independent adjusting firms (9 percent), and engineering firms, law firms, or other third-party administrators (4 percent), involved in the processing and evaluation of hail claims. The majority of respondents are involved with both personal and commercial lines, and 30 percent are claims supervisors, managers, or executive-level claims personnel. In addition, 39 percent of the participants handle 60 or more hail claims in an average year.

The survey confirmed a key WDT hypothesis that on-site evaluations are the preferred verification methodology. A total of 84 percent of those surveyed indicated they "always" (63 percent) or "usually" (21 percent) conduct an on-site investigation. Less than 4 percent indicated

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they "rarely" or "do not" conduct an on-site investigation.

When queried regarding other resources used to validate hail losses—specifically excluding on-site investigations—the majority of those surveyed indicated they use weather reports. While the majority of the survey respondents use these reports as an instrumental part of the hail claim investigation, no single weather information resource was selected by more than 15 percent of the respondents. The weather resource choices included commercial weather companies, the National Climatic Data Center (NCDC), local National Weather Service offices, *Storm Data* (publication issued by NOAA/NWS), the Internet, and various other sources. The Property Loss Research Bureau (PLRB) and Property Claim Service (PCS) were the most commonly mentioned by the respondents as "other" resources (write-in answer) utilized to access hail data.

A possible reason than no single source is the preferred provider of hail data is that there are many end-sources to access this information, including government, non-profit, and commercial companies. But where do they obtain their data? In general, collection of hail data in the United States originates with the National Weather Service (NWS). The primary input to this collection of data is human observations, which are submitted by NWS meteorologists, trained weather spotters, and ordinary citizens who phone their local NWS office to report the location, date, time, and estimated size of hailstones. The hail data are then provided to consumers via the National Climatic Data Center (NCDC) and the Storm Prediction Center (SPC). Finally, this information is repackaged by the other entities that distribute hail data.

Many commercial weather companies augment the NWS human observation data by review of a meteorologist, who adds his or her professional opinion regarding the likelihood of hail activity at a particular site, based on the surrounding weather data and knowledge of storm activity.

Ideally to validate hail, an educated observer would be present at every loss site during the hail event to document the presence and size of the hailstone. Unfortunately, this is an unattainable goal. From a weather data perspective, however, there are several recent developments that will enhance hail verification—not make it perfect—but help to substantiate hail activity and estimated hailstone size and location, regardless of human observation. Beginning in January 2001, the National Weather Service enabled easier and more open access to NEXRAD Radar level II and III data, a significant opportunity to utilize this robust dataset to evaluate hail fall activity.

The NWS, the Federal Aviation Administration, and the Department of Defense have deployed a network of 144 state-of-the-art Next-generation Doppler weather radars (called NEXRAD) throughout the continental United States. NEXRAD sites collect data continuously and can provide full 3-D coverage of their local region every five minutes. In addition, the NEXRAD has a number of computer algorithms, developed by scientists at the National Severe Storms Laboratory (NSSL), that automatically detect severe weather phenomena. One of those algorithms is the Hail Detection Algorithm (HDA), which identifies those storms that are most likely to produce hail. In addition, the HDA provides an indication of the size of hail presently being produced by a storm.

Studies have shown that the HDA is skillful in determining whether a given storm will produce hail. One study performed in Colorado showed the HDA correctly determined which storm was producing hail 92 percent of the time with an extremely low false alarm ratio of 4 percent (Witt et. al. 1998). Also, based upon a geographically diverse radar dataset, the HDA has demonstrated very accurate detections of severe hail including the probability of detecting hail greater than one inch (87 percent) and two inches (96 percent). These accuracy numbers reflect the use of only one radar to detect hail.

Lynne Lawry *is the vice president of Nimbus, a provider of business development consulting to weather-related organizations. Her primary focus is to supply weather solutions, resources, and education to the insurance community.*

E. DeWayne Mitchell *is a senior meteorologist with Weather Decision Technologies, Inc. (WDT). Prior to joining WDT, DeWayne worked for the National Severe Storms Laboratory for 12 years.*

Based on the need identified in the survey, WDT scientists have now created a proprietary enhancement to the algorithm and a commercially available hail report, which incorporates the human observation data, NEXRAD data, and WDT's HailSwath Prediction Algorithm (HPA). HPA is capable of utilizing overlapping data from multiple NEXRAD sites that cover the area of interest. This allows for increased reliability to detect hail over the lifetime of hail generating storms. It is important to emphasize that performance is a function of atmospheric conditions, proper operation and calibration of the radar, and quality reports of hail; however, used in conjunction with on-site investigations, these types of reports can significantly enhance the adjusters' knowledge of what likely happened at the loss site.

When discussing hail in the insurance community, it is almost impossible to do so without including roofs in the conversation, since a significant portion of hail claims are damage to roofs or related structures (siding, gutters, flashing, etc.). In the WDT survey, 81 percent indicated that one-half or more of all the hail losses they adjust are roofing-related losses.

Haag Engineering Company, a Dallas-headquartered engineering firm has been evaluating roofing losses since 1924 and has assessed more than 10,000 roofs in the past 10 years. In the overwhelming majority of these evaluations, a determination of hail damage was the purpose for the review. What are engineers, adjusters, and other investigators looking for when distinguishing naturally occurring hail from deliberately inflicted mechanical damage? Naturally occurring hail damage to roofs or any other structure is going to vary in size, shape, and depth of the impact site, due to the randomness of hailstone dimension, shape, and density. Further, the density and condition of the impacted material add to the resulting damage or lack thereof.

Most hail-related damage is cosmetic and does not affect the useful life of roof shingles.

When the velocity is sufficient and hail strikes wood shingles and shakes, damage is sustained when the hail impact is great enough to break the wood and thereby compromise one ply of the roofing and leaving two narrow shingles (or shakes) secured with only a single fastener. Built-up roofs (most typical felt and coated materials) are damaged when the impact of the hailstone fractures the membrane of the material, which compromises its ability to keep moisture out of the lower levels of the structure.

The physical dynamics of wind-driven, hail-producing storms are likely to cause more damage to windward exposed locations than leeward exposed locations. Damage to sloped roofs facing in different directions can vary significantly if the hail is wind-driven. The same scenario occurs when losses are to automobiles and other property. Damage may be heaviest on the horizontal and windward sides, while other areas will have relatively little or no damage.

Often the indicators that do not support natural hail are even distribution of events and consistent size and shape of the impact sites. Additionally, damage to a roof with a lack of impact sites on metal vents, flashing, or HVAC equipment can be indicative that the damage was not caused by hail.

In recent years, roof shingle manufacturers have been listing products that conform to Underwriters Laboratories test standard UL 2218, which classifies the resistance of a particular product to hail damage. The standard, released in May 1996, tests roofing materials that are classified to the test method using the free-falling steel balls and ranks in classes of ascending order, Classes 1 through 4, where Class 1 has the least resistance to impact. Many insurance companies offer cost-saving programs to homeowners installing UL 2218 Class 4 rated products. Several industry studies are underway to analyze the financial cost benefit, for the property owner and the carrier, of using hail-resistant roofing materials. While some financial benefit is certain, more years of installed history will help to understand the long-term benefits from these products.

Hail damage in the United States costs the insurance industry more than a billion dollars annually and while there is no end in sight, claims professionals will continue their quest of accurate hail assessments, using on-site investigations augment with weather reports, and looking for building code changes and other necessary long-term efforts to reduce hail losses. ■

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How Is Hail Formed?

When falling raindrops, caught in upward rising wind (updraft), encounter air temperatures below 32 degrees F, they freeze and become hailstones. As the hailstones start to fall to the earth's surface, they may be carried back up through the cold air, causing another layer of ice to form and creating a larger hailstone. This process can occur over and over again until the size and weight of the hailstone can no longer be suspended by the air/wind and if finally drops to the ground. Density, size, and shape can all vary significantly with each storm cell.

Motor Vehicle Records May Not Provide an Accurate or Complete Account of Driving History

(IRC News Release)

Visit the Underwriting Section web site at **www.cpcusociety.org** to learn more about the accuracy of motor vehicle records. MVRs, an important tool for underwriting, may not yield the results anticipated. The article states, "21 percent of convictions sampled in Florida were not found on the respective driver's MVRs." ■

Announcement—New Arrival

For those of you not aware, Fred Parcells, CPCU, ARM, ARe, Underwriting Section chairman, and his wife, Lisa, recently announced the birth of their daughter, Anna Grace, who was actually born on her due date. Now, what are the odds of that?

Third Annual Underwriting Section Luncheon

The Underwriting Section hosted its Third Annual Luncheon on October 22, 2002, at the Annual Meeting and Seminars in Orlando, FL. It was our most successful luncheon yet, with a total of 48 attendees including new designees.

Our Underwriting Section Chairman, Fred Parcells, CPCU, ARM, ARe, welcomed the attendees and spoke briefly about the benefits of joining the section. All new designees present were then recognized and awarded a $25 Society Shop gift certificate. This was followed by an excellent presentation from our web site guru, Dave Medvidofsky. He demonstrated the Underwriting Section web site and spoke of its value to section members, generating some lively discussion in the audience. The grand finale was a raffle for numerous gift certificates and company logo items. We don't think anyone left empty-handed!

We want to express our thanks to the generous contributors who helped support this year's lunch:

- Golden Eagle Insurance
- Harleysville Insurance
- Information Systems and Services
- Insurance Institute of America
- Liberty Regional Agency Markets
- Peerless Insurance Company ■

Fred Parcells, CPCU, ARM, ARe, Underwriting section chairman

Underwriting Section Earns "Circle of Excellence" Recognition

Fred Parcells, Underwriting Section chairman, was pleased to accept the "Circle of Excellence" award at the recent Annual Meeting in Orlando, Florida. The award recognized the section committee's effort in serving its members and promoting the CPCU mission. Many thanks to everyone who contributed to this effort.

CIRCLE OF EXCELLENCE RECOGNITION PROGRAM

Annual Meeting and Seminars Update

by U.K. "Rick" Becker, CPCU, CLU, ChFC

Hopefully, many of you had the chance to attend the Annual Meeting and Seminars in Orlando, FL. The Underwriting Section sponsored two excellent and timely seminars:

- **The 21st Century Underwriter**— The seminar focused on preparing the underwriter for the 21st century. As more and more insurance companies are moving functions to the Internet, the role of the underwriter is continuously changing. The panel discussed changes in underwriting and training for today and tomorrow's underwriters. You would also have learned how underwriting is affected by market conditions and management philosophy, what factors determine whether a risk is underwritten "electronically" or humanly. Discussion also focused on underwriting tools available today and in the future, and how underwriters can work smarter.

- **Toxic Mold—Don't Let It Overgrow Your Bottom Line**—Want to learn more about mold than you ever cared to know? This Annual Meeting seminar co-sponsored by the Underwriting and Claims Sections provided some excellent insight into what toxic mold is and why it has suddenly become one of the hottest topics in the industry. A well-represented panel discussion focused, not only, on first and third-party coverage issues, mold remediation and abatement (terms we will all get to know), but all presented some lively discussion on defending the mold lawsuits and what mold plaintiffs will assert in these lawsuits.

Good news for those not able to attend the CPCU Society's Annual Meeting and Seminars. We are in the process of putting together a synopsis of both these seminars to publish in the next edition of *Underwriting Trends*. We also plan to post additional information on the Underwriting Section's web site.

Speaking of the web site, if you have not visited **http://underwriting.cpcusociety.org** you really need to take a few minutes to check it out!

It's easy enough to sign in, since all you need is your member number. Instructions for logging in are on the site.

Check on what's new and go to Underwriting Tools to find information on insurer solvency and regulatory oversight, as well as an extremely useful workbook designed by John T. Gilleland, Jr., CPCU, AIS, API, Morgan D. Jones, and Ruth Fennell, AIM, SPHR. The workbook examines the renewal underwriting of automobile exposures and provides a framework for structured decision making. The document is broken out by chapter. We thank the authors for their generosity in making this tool available for members of the Underwriting Section. ■

Underwriting Trends is published four times a year by and for the members of the CPCU Society's Underwriting Section.

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