Importance of Best Guesses in Emergency Situations

Abstract
During emergency situations, such as natural disasters or the current pandemic, there may not be immediate access to research-based information or information may be nonexistent or conflicting. In such scenarios, Extension personnel may be required to make best guesses based on “what is known so far.” Depending on the urgency of the situation, Extension personnel should draw on opinions and expertise from diverse networks of people and resources before making a best guess. When making a best guess, the Extension professional should follow up to determine whether any information disseminated and recommendations made were correct or not. In either case, the result should be made known.

Keywords: best guess, networks, research-based information, follow-up

Introduction
The most fundamental charge of all Cooperative Extension System personnel is to provide up-to-date research-based information to the people, communities, and organizations they serve. However, large-scale disasters such as the 2018 magnitude 7.1 Cook Inlet earthquake in Alaska or the current global COVID-19 pandemic warrant a very rapid response. Sometimes this situation has to be met with limited information—what we call best guesses or "what is known so far" determinations.

University publications and resources from the Extension Disaster Education Network and eXtension can directly address many situations in an emergency, but some situations may not allow for access to such resources. During an emergency, electricity, phones, the Internet, roads, and so on may not be available for accessing research-based information resources.

For example, immediately following the 2018 Alaska earthquake and its thousands of aftershocks, many homeowners' wells began to produce silty water and there was concern about whether the water was safe
to drink (Brown, Nash, & Tannehill, 2019). At the time, the Internet and other communication means were
down, so it was not possible to access research-based information. Drawing on personal observation and
advice from experts in the field, agent Stephen Brown, of our author team, made a best guess based
stemming from a "what is known so far" understanding; although he suspected the water likely was safe,
he recommended that residents take the precaution of boiling their water. A best guess in this situation was
important because many roads had been destroyed, meaning that for many, there was not access to known
safe water supplies. Because it was unknown when the roads would be reopened or when communications
would be restored, Brown gave the advice not knowing whether it was supported by research-based
information. It was his best guess based on the information he had.

The ongoing COVID-19 pandemic provides a more recent example of a best guess scenario. In Alaska, most
homeowner emergency response advice from Extension and the government assumes that families will
need to make a quick emergency evacuation from home due to earthquake or wildfire. The shelter in place
order from the governor created a reverse situation. Instead of preparing for a quick move from home,
people were preparing for a long stay in their homes. This preparation tended to include stockpiling of
supplies in one location within the home.

At the time, the Centers for Disease Control and Prevention (2020) already had advised people with mild
symptoms of COVID-19 to isolate themselves in their homes. It occurred to Extension specialist Art Nash,
also of our author team, that having supplies stored in one part of one's home and a sick person recovering
in another part greatly increased the chances of cross contamination with the virus. His best guess was to
recommend distributing food and supplies to different parts of the house. He believed that in theory this
would reduce the risk of cross contamination by minimizing direct exposure of other family members to the
ill person. At the time, he did not have peer-reviewed literature to support his recommendation, but he did
have advice from Extension colleagues that guided his decision and associated recommendations.

Advice for Making Best Guesses

In an emergency situation, there may not be access to research-based information or such information may
be limited, nonexistent, or conflicting. This is why it is important to develop a diverse local, state, national,
and even international network of knowledgeable people with varied resources (Harden, Bain, Heim, Bohen,
& Becher, 2020) who can provide insight during a time of need. At the local level, membership in civic
service clubs, such as Kiwanis International or Rotary International, can expose you to a wide swath of
experience and knowledge that can be drawn on during a time of need. Participation in statewide and
national professional organizations also can help you develop far-flung and diverse networks (Thomas,
Stripling, Stephens, & Stephenson, 2018). By attending meetings of such organizations, you further expand
the personal professional knowledge you will need when the inevitable circumstance requiring a best guess
occurs. Also, keep in mind that social time at conferences is just as important as meeting time for
establishing networks.

When you need to make a best guess, do not do so in a vacuum if at all possible. Confer with your
colleagues. In your Extension office, bring together other agents, advisory committee members, program
assistants, administrative assistants, custodians, and others to gather insights. For example, in December
2007, Brown County, Kansas, experienced the worst ice storm in its history. County Extension director
Jennifer Ploeger brought the county commissioners together for best guess advice when all means of
communication and the electrical grid had been destroyed (Brown & Ploeger, 2008). At issue was what kind of safety advice Extension should be offering homeowners operating electrical generators in order to protect utility workers.

It is a good idea to maintain a list of cell or home phone numbers of Extension personnel throughout your state who can be contacted as needed. Having such information allows you to make connections when you are not able to be in your normal office setting. Alaska has five agricultural/horticultural agents spread across the state. Although all five have similar subject matter backgrounds, each has unique knowledge, skills, and experiences to draw on. Calling one or more of these agents for advice in the absence of research-based information can help one make an informed best guess decision.

Finally, understand that when a best guess is made, it is important that all parties involved know that the information is based on "what is known so far" and that an educated best guess is being made. It can be tempting to omit this point because of pride and/or the desire to be seen as the expert, but you must be transparent about the situation.

**Conclusion**

We argue that making best guesses in the absence of research-based information is a critical role for Cooperative Extension System personnel across all subject matter disciplines. This tactic becomes especially important in emergency situations in which fast responses are needed and lines of communication have broken down.

Best guesses can be improved if there is a network of diverse people and resources to draw on. When an Extension professional must make a best guess, it is paramount that he or she follow up to determine whether any associated advice given was correct. If recommendations were not correct, the Extension professional should provide corrected information as quickly as possible. Likewise, if the best guess was correct, the Extension professional should make that circumstance known.

**References**


