IMPACT

Master Gardener volunteers create database for more effective reporting

AT A GLANCE
Horticultural data collected through Ada County's UI Extension Plant Diagnostic Clinic is effectively managed for ease of access and reporting with an online database website.

The Situation

Since the mid-1980s, the University of Idaho Extension office in Ada County has gathered, tallied, recorded and utilized information garnered from county residents who either called or visited the UI Extension office with plant or insect samples and gardening queries. Information was written on paper intake forms filled out by clients initially, and added to by the Extension educator or Master Gardener (MG) researching the query through UI Extension Plant Diagnostic Clinic. On a monthly basis, the intake forms were tallied by hand and the information used to track number of residents assisted, plant disease and insect outbreaks, the most asked questions, and developing horticultural trends in the county. Any significant outbreak or trend initiated the timely writing of newspaper and newsletter articles to alert the public. Lastly, the names and addresses of clients were added to a confidential UI Extension mailing list to announce upcoming horticultural classes. Over the years data continued to be gathered, but instead of hand tallied, Microsoft Excel was utilized.

In 1985, Ada County's population was only 189,811; the population in 2017 is now estimated at 444,028, a 134 percent increase. Coinciding with this rise in population was an increase in residents contacting the University of Idaho Extension office with horticultural concerns. The Plant Diagnostic Clinic receives 1,000 plant and insect samples annually, and another 2,500-3,000 phone or email queries. It has been observed recently that more clients are contacting the office by phone or email instead of in person since high quality photos of plant and insect problems can be taken and sent via smartphone.

Our Response

In 2014, a committee of Advanced Master Gardeners (AMG), along with the horticulture Extension educator, met to discuss the creation of an online database for better data management. A website database could handle the mountain of horticultural information being gleaned through the plant clinic and provide access to all facets of that information. It was decided that the website had to be user friendly and easily searched and cross referenced to determine which areas of the county were impacted with specific plant diseases, weeds or insects. The database also needed to store enough pertinent information on past diagnoses to assist MG volunteers in addressing future questions and reoccurring plant problems. Finally, the database had to provide the ability to retrieve and analyze the data in a timely fashion to be of value to UI Extension for program impact reporting and educational purposes.

Program Outcomes

An Advanced Master Gardener took on the development of the database website. After a year of refining and clarification of the design, an initial version was made available in 2015. Original AMG committee members trained 25 other Master Gardeners to transcribe information from the paper intake forms into the database. From 2015-2017, over 5,000 records were entered and archived while the database continued to be fine-tuned as MG volunteers used the system and made suggestions.

This improved database will allow for more effective reporting of UI Extension program impacts. The data is now available for educational purposes and it can be cross referenced for plant clinic use. Information can be sorted into categories that appear in a knowledgebase, allowing volunteers to do targeted research for specific local garden problems. The process of creating accurate and useful reports for internal and external office use has been made efficient and manageable. Reports can be generated that show the number of people contacting the UI Extension office in any given time frame, their zip code, the number of plant or insect species and specific issues queried, the references used during researching the problem and much more. New horticultural trends and issues can be charted and followed in real time, as well as shared with other UI Extension offices in the state when needed.

The Future
In the future, MG volunteers would like to bypass the paper intake forms altogether and have entries entered directly into the database as clientele contact the Plant Diagnostic Clinic. All future Master Gardener volunteers will be given an opportunity to be trained in the use of the website; this will create a dedicated taskforce to maintain the database. Secure hosting for this valuable website is essential and needed before this project can go much further as the database includes sensitive information such as clientele names, home and email addresses, and phone numbers. Sharing this database concept with other University of Idaho Extension offices is likely in the future.

FOR MORE INFORMATION

Susan Bell, Extension Horticulture Educator and Master Gardener Program Director
University of Idaho Extension, Ada County
5880 Glenwood Street
Boise, ID 83714
Phone: 208-287-5900
Fax: 208-287-5909
Email: sbell@uidaho.edu

Megan Sutton, Master Gardener Program Assistant & Project Dev., Design and Support
University of Idaho Extension, Ada County
5880 Glenwood Street
Boise, ID 83714
Phone: 208-287-5900
Fax: 208-287-5909
Email: msutton@uidaho.edu

Mike Witschen, Advanced Master Gardener and Project Development, Support and Trainer
University of Idaho Extension, Ada County
5880 Glenwood Street
Boise, ID 83714
Phone: 208-287-5900
Fax: 208-287-5909
Email: adamg@uidaho.edu

Sandi Perkey, Advanced Master Gardener and Project Trainer
University of Idaho Extension, Ada County
5880 Glenwood Street
Boise, ID 83714
Phone: 208-287-5900
Fax: 208-287-5909
Email: adamg@uidaho.edu