What is it?

Partnership of 74 land-grant universities.

Internet-based collaborative environment.

Complements community-based extension.

Collaborative content-creation.

Up-to-date, research-based information.

Accessible 24/7/365.
Before… Cooperative Extension working separately.
Now...

Cooperative Extension working together pooling resources creating a hub of valuable information.
The system recognizes where the user is.

Helps connect user to the most relevant information.
How is it funded?

- Institutional Assessments
- New Technologies for Ag Extension (USDA)
- Private Funding

Graphic provided by Craig Wood, eXtension
How is it organized?

http://21stcenturylearning.typepad.com/blog/community_of_practice/
Community of Practice (CoP)

A group of people...
- who share a similar challenge
- who interact regularly
- learn from and with each other
- improve their ability to address their Challenges

Community of Practice
at eXtension

A virtual network of subject matter content providers consisting of faculty, professional and para-professional staff, county educators, industry experts, clientele and government agency representation who share knowledge or competence in a specific content area and are willing to work and learn together over a period of time to further develop and share that knowledge in forms of educational products and programs.
Community of Interest (CoI)

An identified group of individuals sharing similar interests concerns educational needs around a subject area.

http://pairadimes.davidtruss.com/tag/metaphor/
How is a CoP created at eXtension?

Existing Extension programs seeking to expand reach.

A group of individuals gather around a shared interest.

A group forms to address a recognized stakeholder need.

These may be formed within eXtension and become certified CoPs in order to receive operation funding.

OR

Funding may be secured in advance through a grant program (USDA-NIFA) for the purpose of creating a CoP.
Who are we?
Researchers
Extension Agents
Faculty
Technicians
Specialists
in
Horticulture
Tree Fruit
Plant Pathology
Agricultural Education
NC140
Improving economic and environmental sustainability in tree-fruit production through changes in rootstock use

NECC1009
Multidisciplinary evaluation of tree fruit cultivars
Who is in our CoI?
(CoI = stakeholders)

- Nursery professionals
- Commercial growers
- County educators
- Master gardeners
- Home gardeners
- Consumers
Researchers have produced a great deal of information relating to apple varieties and rootstocks over the past 30 years, but much of this information is not easily accessible to those who are interested in it.
Goals

Develop diverse and dynamic educational tools to provide research-based, reliable information.

Increase **productivity, profitability and sustainability**.

Increase **adoption** of new and existing apple **rootstocks and cultivars** ideal to particular regions.

Improve **crop characteristics**.

**Reduce** incidence and impact of industry-critical **pests and diseases**.

Increase **consumer knowledge** of regional apple industry.
Outreach
what we plan to do

Dynamic web products
Interactive maps
Searchable databases of rootstocks/cultivars
Photo galleries
Video library
Podcasts and webinars
Interactive, self-paced courses

Engage
Facebook page
Blog
Ask an Expert
Year 1  (June 2010 – June 2011)

Perform needs assessment and analysis

Collate information
  Existing extension materials
  Journal articles
  Photos
  Videos

Establish social media presence

Begin development of online information tools

Launch first stage of public site on extension.org
Year 2 (July 2011 – June 2012)

Timeline

Develop

Disseminate

Evaluate

Continue development of all site features

Conduct evaluations and analysis to guide further development

Beta-testing of dynamic content

Fully engage with all eXtension tools (ie. Ask an Expert)
Year 3 (July 2012 – June 2013)

- Complete development of dynamic online tools
- Continue to build FAQ database
- Website fully launched and functional
- Evaluation and analysis of site effectiveness
- CoP members actively involved in eXtension
- CoP gains new members, become active in sustaining CoP.
Web Outline – Draft, Items 1 of 12

1. Factors to consider when choosing a rootstock
   - Tree size
     • explain the terminology used such as dwarfing/semi-dwarfing etc
     • % of standard
     • Links to any other publications, websites on this topic.
   - Precocity
     • define term
     • explain how rootstocks affect time to flowering
     • Links to any other publications, websites on this topic.
   - Productivity
     • how measured
     • yield and yield efficiency explained
     • Links to any other publications, websites on this topic.
   - Winter hardiness (USDA hardiness zones)
     • Define hardiness zones
     • link to web site that allows people to search for their zone
     • How hardiness impacts fruit production
     • Links to any other publications, websites on this topic.
   - Suckering
     • define what it is
     • pictures of scion/rootstock combinations demonstrating suckering
     • Links to any other publications, websites on this topic.
   - Virus status
     • Listing and descriptions of potential viruses
     • Links to any other publications, websites on this topic.
   - Tree support
     • Descriptions of types of tree support e.g. posts, wire, conduit, bamboo, angle iron
     • Links to any other publications, websites on this topic.
   - Where rootstocks have been tested (NC 140 or other research plantings)
     • What is NC140
     • Type of research NC140 cooperators conduct
     • Link to nc140.org and CRIS reports
2. Buying apple trees
   Choosing a nursery
   List of nurseries (or links to individual nursery sites)
   Links to any other publications, websites on this topic.
3. How to select and prepare a site for planting
   Soil testing and Nutrition
   Rootstock graft union location
   Links to any other publications, websites on this topic.
4. Tree spacing
   Jon’s tree spacing calculator
   Other available systems
   Links to any other publications, websites on this topic.
5. Parts of the apple tree
   Graft union
   Scion (vs cultivar)
   Rootstock
   Crown vs. collar
   Spurs
   Links to any other publications, websites on this topic.
6. Planting apple trees
   Method
   Timing
   Planting videos
   One tree in a home landscape
   Acres in a commercial planting
   Links to any other publications, websites on this topic.
7. Why trees decline and might die (focusing on the root system)
   Temperatures (too hot, too cold)
   Water (too much, not enough)
   Physical damage
      Deer
      Rabbits
      Hail
      Wind
   Burr knots
   Insects
      Dogwood borer
   Diseases
      Crown rot
      Fire blight
   Links to any other publications, websites on this topic.

8. How are new rootstocks developed
   Breeding programs
   Testing process
   Characteristics selected for
   Links to any other publications, websites on this topic.

9. Rootstock and apple tree propagation (Michele?)
   Rootstock Propagation
      Stool beds
      Tissue culture
   Apple tree propagation (Diane?)
      Asexual reproduction (summary of why grafting/budding)
      Types of grafting and budding used (link to videos if we know of any)
   Links to any other publications, websites on this topic.
10. List of categories of rootstocks (with rootstocks presently on the rootstock spreadsheet;)

**Dwarfing**
For each specific rootstock listed:
- Synonyms of rootstocks
- Origin - cross if known and breeding program (might be helpful here to link to any articles that have been written on the rootstock)
- Current status on availability
- Where it has been tested within NC140 or other research plantings
- Tree size, precocity, productivity, winter hardiness, suckering, virus status, trunk support

**Semi-dwarfing**
For each specific rootstock listed:
- Synonyms of rootstocks
- Origin - cross if known and breeding program (might be helpful here to link to any articles that have been written on the rootstock)
- Current status on availability
- Where it has been tested within NC140 or other research plantings
- Tree size, precocity, productivity, winter hardiness, suckering, virus status, trunk support

**Standard size**
For each specific rootstock listed:
- Synonyms of rootstocks
- Origin - cross if known and breeding program
- Current status on availability
- Where it has been tested within NC140 or other research plantings
- Tree size, precocity, productivity, winter hardiness, suckering, virus status, trunk support
11. Publications
   NC140 studies that have been published with links if possible
   Region-specific apple information - Links with descriptions to extension publications and other regular
   publications, newsletters, UMass Fruit Advisor - and put under the appropriate region
   Commercial
      Northeast
      Southeast
      Mid-west
   Homeowner/hobbyist
      Northeast
      Southeast
      Mid-west
   Other web sites of interest (national or international sites with descriptions of why in list)

12. Glossary of terms
Web Site Launching June, 2011

Apple Rootstocks and Cultivars

www.extension.org/apple

Facebook: Apple Rootstocks and Cultivars