



# Great Lakes Fruit, Vegetable & Farm Market EXPO Michigan Greenhouse Growers EXPO

December 10-12, 2019

DeVos Place Convention Center, Grand Rapids, MI



## Working with Knee Pain in Agriculture

**Moderator:** Ned Stoller, AgrAbility

1:00 pm

Working with Shoulder Injuries

- Ned Stoller, Easterseals Michigan AgrAbility
- Matthew Schmitz, Hulst-Jepsen Physical Therapy

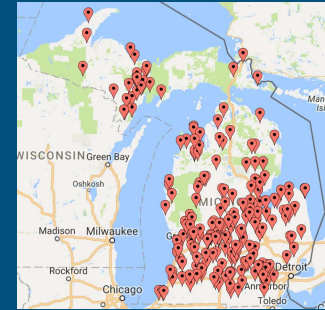
## Working With Knee Injuries in Agriculture

Matthew Schmitz M.S.P.T., Cert MDT, OCS, CIDN  
Ned Stoller, Agricultural Engineer

## Who is Michigan AgrAbility?

Michigan AgrAbility is a non-profit that helps growers with serious medical conditions to keep working.

We are a partnership between Michigan State University Extension and Easterseals Michigan.



## Common Causes of Knee Pain

- Repeated trauma
- Prolonged standing, sitting, or weightbearing
- Heavy lifting
- Lack of hip and knee strength
- Lack of flexibility and range of motion
- Poor footwear

## Observations of Farmers and their pain

- Observation of 3 generations of Farmers
- Extremes from sedentary to vigorous activity
- Do not take "rest" days or even periods
- Work through pain and push their body too hard
- Difficult to change habits
- Small injuries become large injuries – get proactive!
- "I just have to live with the pain"
- Wait until major surgery is required.

## Traditional Treatments

- Rest, ice, heat
- Medication – NSAIDS, tylenol, Prescription - steroids, muscle relaxors, pain killers
- Injections - cortisone
- Minor / major surgical procedures
- Physical therapy



## What Can Physical Therapy Do For You?

- Get to the root of the problem
- Address ROM, flexibility, strength, biomechanics, gait, balance
- Establish a treatment diagnosis, problem list, goals and plan of care
- Tailored to your needs
- Decrease pain so you can move and function freely



## Strategies to Prevent or Reduce Knee Pain

- Exercise - Stretching/range of motion
- Exercise - Strengthening
- Exercises before and after work tasks
- Wellbeing – weight loss, eating well, rest (not sleep)
- Good footwear
- Avoid or modify aggravating activities

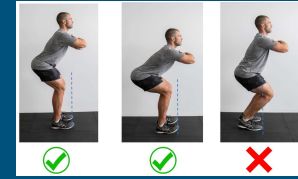
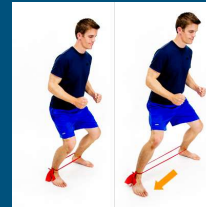
## Exercises to Reduce Knee Pain – Back/hip stretches



## Exercises to Reduce Knee Pain - Stretching



## Exercises to Reduce Knee Pain - Strengthening



## Working With Knee Pain

What tasks make your knee pain worse?  
 Better? Make a list & accommodate.

1. Does the job have to be done?
2. Can it be done a different way?
3. Can it be traded with another worker?
4. Is there a tool to help reduce the pain?
5. Could you adapt a tool to help reduce the pain?
6. Could you design a new tool to help reduce the pain?



## Visit us in booth 1547!



Ned Stoller  
 Agricultural Engineer &  
 Assistive Technology Specialist  
[www.MichiganAgrAbility.org](http://www.MichiganAgrAbility.org)



Matt Schmitz  
 Physical Therapist  
[www.hjphysicaltherapy.com](http://www.hjphysicaltherapy.com)