

# Jeremiah D. Davis, EIT

3980 South 500<sup>th</sup> Avenue  
Ames, IA 50014

## EDUCATION

**Iowa State University**, Ames, IA

*Ph.D. Agricultural & Biosystems Engineering* May 2006

Emphasis: Controlled Animal Environment

GPA: 3.76/4.00

**University of Kentucky**, Lexington, KY

*M. S. Biosystems & Agricultural Engineering* May 2004

Emphasis: Structures and Controlled Animal Environment

Research: “**Methods of Remote, Continuous Temperature Detection in Beef Cattle**”

GPA: 3.80/4.00

**Texas A&M University**, College Station, TX

*B. S. Agricultural Engineering*, December 2001

Emphasis: Power and Machinery

GPA 3.33/4.00, Major GPA 3.80

**West Texas A&M University**, Canyon, TX

August 1996 – May 1998

GPA 3.53/4.00

## EXPERIENCE

**GRADUATE RESEARCH ASSISTANT - University of Kentucky**, Department of Agricultural and Biosystems Engineering, Ames, IA. January 2004 to Present.

- Conducting experiments to determine beef cattle behavior during heat stress using global positioning systems (GPS).
- Writing grants, reports and other presentation materials.

**GRADUATE RESEARCH ASSISTANT - University of Kentucky**, Department of Biosystems and Agricultural Engineering, Lexington, KY. January 2002 to January 2004.

- Research the methods of remote temperature measurement in beef cattle considering implementation into current production practices.
- Management of all project activities including: planning, design, and experimental implementation
- Coordination with personnel from UK Biosystems & Agricultural Engineering, Animal Sciences, and Management Operations Departments.
- Writing reports, posters and presentation materials.

**UNDERGRADUATE RESEARCH ASSISTANT - Texas A&M University**, Department of Biosystems and Agricultural Engineering, College Station, TX. September 2000 to December 2000.

- Assisted in operation of the Texas A&M Univ. Agricultural Engineering Cotton Gin Test Laboratory.
- Prepared ginned-cotton samples for further hybrid testing (staple length, quality, etc.).
- Performed gin maintenance, equipment modification, and new fabrication in dept. machine shop.

**SELF-EMPLOYED - Custom hay hauling for Triple H Farms**, Bryan, TX. May 1999 to October 2001.

- Sold and delivered hay products to large customer base throughout the Houston area.
- Performed routine maintenance on equipment, trucks and trailers.

**INTERNSHIP - Case Corporation**, East Moline, IL. May 2000 to August 2000.

- Supported employees within the Cotton Engineering Group.
- Developed concept designs for the recently released CPX610 six-row cotton picker.
- Worked in cotton picker test facilities, and conducted field test operations.

**MAINTENANCE - Sugarwood Farms**, Bryan, TX. September 1998 to April 1999.

- General maintenance and renovation of cutting horse facilities.
- Cleaned horse stalls.

**FARM MANAGER - Jerry Sims Farms**, Happy, TX. May 1998 to August 1998.

- Serviced and operated heavy machinery and modified existing equipment.
- Utilized portable DC, MIG, and arc welders.
- Implemented dry-land farming practices and dealt broadly with Conservation Resource Program (CRP).
- 75+ hours per week.

**MASONRY ASSISTANT - Bassett Masonry**, Amarillo, TX. December 1997 to April 1998.

- Assisted bricklayers in residential masonry construction.
- Managed site setup (scaffolding, brick, equipment, and supplies).
- Mixed concrete and cleaned site.

**FARM MANAGER - C. R. Wesley Farms**, Happy, TX. May 1995 to April 1998.

- Managed large machinery operations, repair and design.
- Implemented crop management practices with dry-land and irrigated crops of milo, hay and wheat.
- 70+ hours per week.

## HONORS

Aggie REPS – Aggies Recruiting Exceptional Prospective High School Students (1998-2001)

Alpha Epsilon Honor Society – Kentucky Omega Chapter (2003-2004)

Alpha Zeta Honorary Fraternity – West Texas A&M Chapter (1997-1998)

ASAE Superior Service Award - Texas Section (2001)

ASAE National ¼ Scale Tractor Design Competition (1999-2001)

- 1999 Standings; 7<sup>th</sup> Overall, 3<sup>rd</sup> Performance
- 2000 Standings; 2<sup>nd</sup> Overall, 1<sup>st</sup> Performance, 1<sup>st</sup> Safety, 2<sup>nd</sup> Oral Presentation...

Eisenhower Leadership Program – Fall 1999

Gamma Sigma Delta Senior Award of Merit (2001)

Gamma Sigma Delta – Agricultural Honor Society (2003-2004)

National Society of Collegiate Scholars – lifetime member

## AFFILIATIONS

Aggie Pullers Club. President and Cofounder (2000-2001)

**American Society of Agricultural Engineers (ASAE)**

- SE 302 - Environment of Animal Structures (2003-2004)
- Preprofessionals National Vice President (2000-2001)
- Membership Development Council (2000-2001)
- Vice President; Texas A&M Chapter (2000-2001), Engineering Council Representative (1998-1999).

American Society of Heating Refrigerating and Air-Conditioning Engineers (ASHRAE), (2001-2003)

West Texas A&M University Herdsmen; Treasurer (1996-1998), Alumni.

## PUBLICATIONS

Bicudo, J.R., J.D. Davis, R.S. Gates. 2004, **Monitoring Grazing Dairy Heifers Water Intake During Hot and Humid Weather**. Procs. Of the 2<sup>nd</sup> Technical Section of CIGR on New Trends in Farm Buildings, May 2-6, Evora, Portugal (on CD-ROM).

Davis, J.D., E.S. Vanzant, J.L. Purswell, A.R.Green, J.R. Bicudo, R.S. Gates, L. Holloway and W.T. Smith. **Methods of Remote, Continuous Temperature Detection in Beef Cattle**. Paper for the 2003 ASAE International Meeting, Paper #034008, Las Vegas, NV. July 28-31.

Purswell, J.L., J.D. Davis, A.R. Green, R.S. Gates, L.M. Lawrence and R.J. Coleman. **Measuring Ventilation in a Horse Trailer During Transport**. Paper for the 2003 ASAE International Meeting. Paper #034091, Las Vegas, NV. July 28-31.

Green, A.R., J.L Purswell, J.D. Davis, R.S. Gates, L.M. Lawrence, R.J. Coleman and E.F. Wheeler. **Methods for Assessing Horse Well Being During Transport**. Paper for the 2003 ASAE International Meeting, Paper #034092, Las Vegas, NV, July 28-31.