

Annual Conference of the American Forage and Grassland Council (AFGC 2022)

Wichita, Kansas, USA
7-12 January 2022

ISBN: 978-1-7138-5976-5

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2022) by American Forage and Grassland Council (AFGC)
All rights reserved.

Printed by Curran Associates, Inc. (2022)

For permission requests, please contact American Forage and Grassland Council (AFGC)
at the address below.

American Forage and Grassland Council (AFGC)
PO Box 867
Berea, KY 40403
USA

Phone: 800.944.2342

www.afgc.org

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2633
Email: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

INCORPORATING PERENNIAL FORAGES INTO SOUTHERN ROW CROPPING SYSTEMS	1
<i>E. Billman, B. Campbell, F. Reay-Jones, G. Sigua</i>	
USING TECHNOLOGY TO MINIMIZE LABOR AND IMPROVE LIVESTOCK PRODUCTION UNDER GRAZING	2
<i>C. Bagley, R. Palfreyman, J. Whitson</i>	
BIOCHARS IMPACTS ON PLANT GERMINATION AND GROWTH RATES WHEN LAND- APPLIED AND RUMINAL FERMENTATION RATES WHEN ADDED TO DIETS	3
<i>C. Bagley, K. Han, R. Palfreyman, J. Whitson</i>	
USING SOCIAL MEDIA FOR FORAGE EDUCATION AND PROMOTION	4
<i>L. Baxter, J. Tucker</i>	
IMPACT OF MANAGEMENT ON BERMUDAGRASS STEM MAGGOT DAMAGE	5
<i>L. Baxter, B. Anderson, W. Hudson</i>	
PATCH-BURN AND ROTATIONAL GRAZING EFFECTS ON PERFORMANCE OF BEEF HEIFERS AND PASTURE PRODUCTIVITY	6
<i>M. Berry, P. Keyser, R. Smith, E. Bisangwa</i>	
EXTRACTION OF LIGNIN MONOMERS FOR UPLC ANALYSIS	7
<i>M. Boss, J. Strickland, M. Aguerre</i>	
GROWTH AND ENSILING OF REDUCED LIGNIN ALFALFA IN THE SOUTHEASTERN US	8
<i>M. Boss, M. Aguerre, J. Strickland</i>	
MEASURING IMPACT OF FERTILIZATION ON BROOMSEDGE ENCROACHMENT IN HAYFIELDS USING REMOTE SENSING	9
<i>J. Bush, C. Teutsch, J. Henning, S. Smith</i>	
EVALUATION OF REMOTE SENSING TECHNIQUES TO MEASURE CRABGRASS ENCROACHMENT IN TALL FESCUE STANDS	10
<i>J. Bush, C. Teutsch, J. Henning, S. Smith</i>	
MEASURING PROPORTION OF LIVE AND DEAD VEGETATION IN PASTURES USING REMOTE SENSING	11
<i>J. Bush, C. Teutsch, J. Henning, S. Smith</i>	
FORAGE PRODUCTION AND NUTRITIONAL QUALITY OF TALL FESCUE AND ALFALFA UNDER LONG TERM WARMING AND SEVERE DROUGHT	12
<i>K. Catunda, A. Churchill, S. Power, B. Moore</i>	
EXTREME SUMMER DROUGHT IMPACTS ON OLD-FIELD FORAGE PRODUCTION AND NUTRITIONAL QUALITY	13
<i>A. Churchill, F. Isbell</i>	
IMPACT OF BMR TRAIT ON DECOMPOSITION RATE OF SORGHUM-SUDANGRASS	14
<i>B. Dooley, J. Bush, C. Teutsch, B. Hendrix</i>	
INVASIVE SPECIES ON KANSAS GRASSLANDS	15
<i>W. Fick</i>	

CHLOROPHYLL FLUORESCENCE AS AN INDICATOR OF PLANT FORAGE STRESS.....	16
<i>S. Goslee</i>	
COMPARISON OF FIVE METHODS OF BOTANICAL ANALYSIS ACROSS KENTUCKY.....	17
<i>E. Gotsick, S. Smith, J. Henning, C. Teutsch</i>	
EFFECT OF AN IMPROVED GRAZING MANAGEMENT SYSTEM ON DAIRY HEIFER PERFORMANCE	18
<i>A. Grev, S. Potts, J. Semier</i>	
EFFECTS OF WHOLE-GRAIN SUPPLEMENTATION ON HEALTH, GROWTH, AND PROFITABILITY OF PASTURE-RAISED LAME.....	19
<i>A. Grev, S. Schoenian, J. Semler, D. O'Brien</i>	
DHURRIN STABILITY AND PRUSSIC ACID RELEASE IN DRIED SORGHUM PLANTS	20
<i>S. Gruss, K. Johnson, M. Ghaste, J. Widhalm, S. Johnson, J. Holman, A. Obour, R. Aiken, M. Tuinstra</i>	
ALFALFA QUALITY IN LIMITED SUBSURFACE DRIP IRRIGATION SYSTEMS	21
<i>K. Harmony, F. Lamm, R. Reyes-Esteves</i>	
SEEDING WARM-SEASON ANNUAL GRASSES INTO PERENNIAL WESTERN	22
<i>K. Harmony, J. Guretzky</i>	
USING GPS TO IMPROVE THE ACCURACY OF FROST SEEDING	23
<i>B. Hendrix, C. Teutsch, J. Jackson, C. Raymond</i>	
YIELD AND PROFIT MAXIMIZING ANNUAL FORAGE ROTATIONS IN THE CENTRAL GREAT PLAINS.....	24
<i>J. Holman, A. Obour, Y. Assefa, L. Simon, P. Mauler</i>	
CRABGRASS RE-SEEDING AND GRAZING MANAGEMENT DEMONSTRATION.....	30
<i>J. Huff</i>	
DRY FERTILIZER IMPREGNATION WITH GRAZONNEXT HL AND DURACOR HERBICIDES: BENEFITS AND LIMITATIONS.....	32
<i>S. Ingram</i>	
IMPACTS OF SMALL GRAIN CEREAL SILAGE MANAGEMENT ON FERMENTATION AND NUTRITIVE VALUE - A SURVEY OF NEBRASKA PRODUCERS.....	33
<i>A. Johnson, J. Rees, B. Beckman, B. Schick, G. Lesoing, E. Laborie, K. Clark, C. Biebler, D. Redfearn, M. Drewnoski</i>	
REACHING GEORGIA FORAGE PRODUCERS IN A VIRTUAL ENVIRONMENT.....	34
<i>C. Knight, L. Baxter, P. Brown, R. Gates, J. Kichler, S. Morgan, L. Ray, S. Tanner, P. Sapp</i>	
IMPLEMENTING RESOURCE CONSERVATION PRACTICES ON HORSE FARMS	35
<i>K. Lea, S. Smith</i>	
WARM-SEASON ANNUAL GRASSES AS COMPANION FORAGE CROP FOR ESTABLISHING WARM-SEASON PERENNIAL GRASSES	36
<i>R. Lemus, J. White</i>	
FORAGE PRODUCTIVITY, WEED DENSITY, AND SOIL PROPERTIES AS AFFECTED BY GRAZING AND TILLAGE OF ANNUAL FORAGES.....	37
<i>P. Mauler, J. Holman, L. Simon, A. Obour, S. Johnson, K. Roozeboom</i>	

RESOURCE SELECTION BY NORTHERN BOBWHITES IN A MIXED LANDSCAPE OF EXOTIC COOL-SEASON GRASS AND NATIVE-WARM SEASON GRASS PASTURES AND FIELDS	42
<i>D. Mitchell, P. Keyser</i>	
MIDWEST COVER CROPS COUNCIL, EMPOWERING A NETWORK OF PROFESSIONALS.....	43
<i>A. Morrow</i>	
SPRING OAT AND TRITICALE FORAGE PRODUCTION AS AFFECTED BY SEEDING RATE AND NITROGEN FERTILIZER APPLICATION	44
<i>A. Obour, J. Holman, L. Simon, P. Mauler</i>	
NITROGEN APPLICATION EFFECTS ON FORAGE SORGHUM PRODUCTION AND NITRATE CONCENTRATION	49
<i>J. Holman, A. Obour, L. Simon, P. Mauler</i>	
UTILIZING COVER CROPS FOR FORAGE IN THE SEMI-ARID CENTRAL GREAT PLAINS.....	54
<i>A. Obour, J. Holman, L. Simon, P. Mauler</i>	
OPTIMIZING TALL FESCUE HAYFIELDS THROUGH NITROGEN AND PHOSPHORUS FERTILIZATION	55
<i>B. Pedreira, D. Sweeney, J. Farney, J. Moyer, D. Diaz</i>	
2020 RESULTS OF TIMED MECHANICAL WEED CONTROL IN EASTERN OHIO.....	56
<i>T. Wiseman, C. Gelley, C. Penrose, J. McCutcheon, M. Landefeld</i>	
MOTIVATIONS AND ISSUES FACED BY LIVESTOCK PRODUCERS PRESERVING FORAGES.....	60
<i>T. Picardo-Perez, R. Lemus, D. Rivera, L. Villalobos</i>	
IMPACTS OF GRAZING COVER CROPS ON ANIMAL PERFORMANCE, CROP PRODUCTION, AND SOIL HEALTH AIN EAST-CENTRAL MISSISSIPPI	61
<i>J. Rushing, J. Lyles, B. Bass, K. Waddell</i>	
EFFECT OF SPECIES AND MATURITY ON YIELD, DIGESTIBILITY, AND PROTEIN CONTENT OF WINTER HARDY SMALL CEREAL GRAIN SILAGE	62
<i>A. Sartin, K. Calus, M. Grabau, A. Kuhn, D. Redfearn, M. Drewnoski</i>	
NOVEL PEST MANAGEMENT STRATEGIES TO CONTROL SMUTGRASS IN SOUTHERN FORAGE SYSTEMS	63
<i>N. Shay, L. Baxter, N. basinger, B. Schwartz</i>	
POST-WHEAT SUMMER COVER CROP EFFECTS ON CROP YIELDS AND SOIL PROPERTIES IN A NO-TILL DRYLAND CROPPING SYSTEM	64
<i>L. Simon, A. Obour, J. Holman, M. Schipanski, S. Johnson, K. Roozeboom</i>	
EFFECTS OF THATCH DEPTH ON NATIVE WARM-SEASON GRASS (NWSG) ESTABLISHMENT	70
<i>K. Swilling, E. Bisangwa, J. Mansfield, C. Bitler, P. Keyser</i>	
ELECTRIC FENCING FOR SERIOUS GRAZERS: A HANDS-ON PROGRAM FOR PRODUCERS AND AGRICULTURAL PROFESSIONALS.....	71
<i>C. Thrailkill, C. Teutsch, M. Hayes, J. McGill</i>	
TEPARY: A DROUGHT TOLERANT FORAGE FOR THE SOUTHERN GREAT PLAINS?.....	72
<i>T. Witt, B. Northup, C. Florez</i>	

Author Index