

**From:** Ed Northam <ENortham@cals.arizona.edu>  
**Date:** December 7, 2007 12:55:45 PM MST  
**To:** Al Fournier <fournier@cals.arizona.edu>  
**Cc:** MPastor@cals.arizona.edu, esoto@cals.arizona.edu, kumeda@Ag.arizona.edu  
**Subject:** Partial Report for Partial 2007 IPM Grant (acct 570706)

AL Here is the email that I sent to Tucson as an interim report on my activities for IPM grant funds (acct. 570706). Also note that I have attached the species list of weeds that were not included in Illustrated Guide to the Weeds of Arizona by K. Parker (1973). This list was finalized as part of the project interim steps accomplished during the time frame that acct. 570706 was active.

I will also send the email that says acct. 570706 was absorbed into the Tucson IPM account after my salary funds terminated in May and I ceased to be a faculty member. In other words, an administrative decision ended this work 2-3 months before the 30 Sept. deadline to spend the money. August and September was when I scheduled to get the final products completed. ED NORTHAM

Francis E. (Ed) Northam, Ph.D., Weed Biologist  
Program Mgr. -- Invasive Plants  
Univ. of Arizona Cooperative Extension Office -- Maricopa Co.  
4341 E. Broadway Rd. Phoenix, AZ 85040  
480/947-3882 (primary) 602/470-8086 ext. 339 (alternate)  
fnortham@msn.com (primary email) FAX 602/470-8092  
enortham@cals.arizona.edu (alternate email)  
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Date: Wed, 06 Jun 2007 16:26:14 -0700 To: Ed Northam <ENortham@cals.arizona.edu>  
From: Deborah Young <dyoung@Ag.arizona.edu> Subject: Re: Fwd: IPM Account question  
Cc: cflynn@Ag.arizona.edu, pattib@cals.arizona.edu

Thanks, Ed. I appreciate the update, as we need to be accountable for IPM funds. Deb  
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At 04:05 PM 6/6/2007, Ed Northam wrote:

Date: Wed, 06 Jun 2007 15:20:56 To: cflynn@Ag.arizona.edu, dyoung@ag.arizona.edu, pattib@Ag.arizona.edu  
From: Ed Northam <ENortham@cals.arizona.edu> Subject: Fwd: IPM Account question

CYNTHIA et al Darlene informed me of a question that has arisen concerning my IPM grant funds (acct. 570706) and documentation of progress on that project.

This work involves producing two on-line fact sheets for AZ weed species that were not included in Parker's 1972 "An Illustrated Guide to Arizona Weeds." Thirty-plus non-native plants have been recognized as pests since Parker's guide was written (see Non-Parker weed list attachment). My part of that project is to (1) determine what species should be presented, (2) produce photos, (3) search for published information, (4) develop identification criteria for the species chosen, (5) compile control strategy information and (6) write text for those fact sheets.

Since that account was activated in January, my work on that project has concentrated on information searching/gathering and making digital photographs for the pest plant species mentioned in the previous paragraph.

Work activities to date include:

- A minimum of 30 hours have been spent photographing foreign plants that have encroached into the lands and waters of central Arizona or producing digital images from 35 mm slide photos that were taken before this project began.
- Information searches have revealed that some species have limited published information in either technical or popular venues (i.e. *Oncosiphon piluliferum* L. f. -- Globe chamomile, or *Pentzia incana* (Thurb.) O Kuntze -- Karoo bush), and at this time, the materials needed for detailed presentations [particularly discussions of proven control measures] that are envisioned for these weed brochures are not available.
- Species files are being built for species included in the Non-Parker weed list; again I have invested a minimum of 30 hours into this activity. For example, I recently found some on-line USDA - NRCS reports announcing the 1981 release of two buffelgrass varieties in Texas.
- Identification and taxonomic books have been acquired to facilitate developing the identification portion of these brochures; none of these costs were charged to 570706.
- Discussions with Central AZ Weed Mgmt. Area participants, SW Veg. Mgmt. Association members and other noxious weed / invasive plant personnel in governmental agencies and private organizations have been conducted to get an understanding of which two species they would like to be published from this project.
- Some of the field herbicide evaluations that I have been conducting since last fall have information that will be included in the species files I am building. Since February, I have consumed a minimum of a 160 hours working with my field experiments. Even though, herbicide trials were not specifically planned as part of my IPM project, these results will become part of the database for Non-Parker species such as Buffelgrass, African Sumac, Mexican Palo Verde and Sweet Acacia once I have completed these trials.

Please note that during the past four months I did not set a block (or blocks of time) aside to which I devoted strictly to work on IPM project activities; however, I constantly evaluate my tasks for the next 2 to 3 days so that I know when I will have a couple of hours or maybe an afternoon when I can work on identification information, take pictures, search for biological information or control methods, build photo files for non-Parker weed species, etc. However, even this short range planning is disrupted by unexpected requests for presentations, weed identification questions, weed management advising, news media interviews, checking field reports of new weeds, or unforeseen Southwest Veg. Management Assoc. affairs and Central Arizona Weed Management Area business matters.

One activity that I haven't accomplished which needs to have been completed already is getting consensus for what the two species will be published. I was planning to send the Non-Parker list to the Natural Resources email list and to 30-40 non-U-of-A government, private and non-profit conservation organization employees who have vegetation management responsibilities. Then let them rank their top 5 choices for which weeds they would prefer to have as the first two fact sheets published. This was intended as a task for early May, BUT that is interrupted with a near total shift to hunting funding, or at least getting my work situation arranged so that I can continue ongoing field projects, write a final report for my just-expired National Fish and Wildlife Foundation grant and complete my IPM project (even if I have to go for a while without salary funds), plus continuing to search for grants. Sending that Non-Parker list to my clientele is a top priority once things calm down concerning my status with U-of-A.

What this translates into is that my typical work schedule is nearly impossible to parcel into specified time segments beyond the next day or two which means I keep a list of ongoing tasks that I check when breaks arise between short fuse commitments. Therefore, it is not feasible to try to break my work day hours into two or three budget categories, and then charge each pay period to multiple budgets. Therefore, the time I charged to 570706 has been dispersed across eight pay periods.

When my field season and public presentation work load started in February this year, it became obvious that large amounts of IPM effort would be after May. As a result, I arranged my time such that late May and June would be when information assembly for those two fact sheets would begin in earnest. ED NORTHAM

**From:** Ed Northam <ENortham@cals.arizona.edu>  
**Subject:** IPM Budget 570706 -- closed  
**Date:** December 7, 2007 1:16:14 PM MST  
**To:** fournier@cals.arizona.edu  
**Cc:** MPastor@cals.arizona.edu, esoto@cals.arizona.edu, kumeda@Ag.arizona.edu

AL Below is the communication that I received about my IPM account closure. I can't say when the actual decision was made to terminate project 570706/IPM2 Maricopa Co, but the email from Patti was when I first knew. ED NORTHAM

Francis E. (Ed) Northam, Ph.D., Weed Biologist  
Program Mgr. -- Invasive Plants  
Univ. of Arizona Cooperative Extension Office -- Maricopa Co.  
4341 E. Broadway Rd. Phoenix, AZ 85040  
480/947-3882 (primary) 602/470-8086 ext. 339 (alternate)  
fnortham@msn.com (primary email) FAX 602/470-8092  
enortham@cals.arizona.edu (alternate email)  
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Date: Mon, 06 Aug 2007 10:00:24 -0700 To: <sandyp@Ag.arizona.edu>, <enortham@cals.arizona.edu>  
From: Patti Baciewicz <pattib@Ag.arizona.edu> Subject: Re: Budget load fed fy07 carryover - IPM

Sandy, et al. This account is closed - please JE these funds back to the main IPM account. Thanks - pattiB.

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At 01:04 PM 08/04/2007, Sandy Pottinger wrote:

Budget for account#/name: 570706/IPM2 Maricopa Co  
A budget load or transfer was recently done totaling: \$2,287. This represents your account's carryover balance as of 6/30/07.  
Federal fiscal year: 2007 Funds must be used by: 9/30/07  
Expect a short waiting period before transaction appears in FRS. If you have questions, please contact me at  
sandyp@ag.arizona.edu or 520-621-1468. Sandy Pottinger

**WEEDY PLANTS NOT INCLUDED IN "AN ILLUSTRATED GUIDE TO ARIZONA WEEDS" by K. Parker (1972)**

Aegilops cylindrica Host. ----- Jointed goatgrass  
Ailanthus altissima (P. Mill) Swingle ----- Tree-of-Heaven  
Arundo donax L. ----- Giant Reed  
Asphodelus fistulosus L. ----- Onion weed  
Brassica tournefortii Govan ----- Sahara mustard  
Bromus diandrus Roth ----- Ripgut brome  
Bromus inermis Leyss. ----- Smooth brome  
Bromus japonicus Thunb.. ----- Japanese brome  
Centaurea diffusa Lam. ----- Diffuse knapweed  
Centaurea biebersteinii DC ----- Spotted knapweed  
Cardus nutans L. ----- Musk thistle  
Cirsium vulgare L. ----- Bull thistle  
Cyperus involucratus Rottb. ----- Umbrella plant  
Eichhornia crassipes (Mart.) Solms ----- Water hyacinth  
Elaeagnus angustifolia L. ----- Russian olive  
Eleocharis atropurpurea J. & K. Presl. ----- Purple spikerush  
Elymus repens (L.) Gould ----- Quackgrass  
Eruca vesicaria (L.) Cav. ssp. sativa (P. Mill.) Thellung ----- Arugula or  
Garden Rocket  
Euphorbia esula L. ----- Leafy spruce  
Euryops multifidus (Thunb.) D.C. ----- Sweet resinbush  
Hydrilla verticillata (L. f.) Royle ----- Hydrilla  
Lepidium latifolium L. ----- Perennial pepperweed  
Lineria dalmatica (L.) P. Mill. ----- Dalmation toadflax  
Mesembryanthemum crystallinum L. ----- Common iceplant  
Muriophyllum aquaticum (Vell.) Verdc. ----- Parrot's feather  
Oncosiphon piluiferum L. f. ----- Globe chamomile  
Onopordum acanthium L. ----- Scotch thistle  
Parkinsonia aculeata L. ----- Mexican palo verde  
Pennisetum ciliare (L.) Link ----- Fountaingrass  
Pennisetum setaceum (Forsk) Chiov. ----- Fountaingrass

Pentzias incana (Thurb.) O Kuntze ----- Karoo bush  
Rhus lancea L. f. ----- African sumac  
Ricinus communis L. ----- Castorbean  
Saccharum ravennae (L.) L. ----- Ravennagrass  
Salvinia molesta Mitchell ----- Giant Salvinia  
Senecio vulgaris L. ----- Common groundsel  
Sinapis arvensis L. [Brassica kaber (DC.) L.C. Wheeler] ----- Wild mustard  
Ulmus pumila L. ----- Siberian elm  
Vinca major L. ----- Bigleaf periwinkle

**The following pest plants have only brief verbal descriptions and no illustrations in Parker's (1972) "An Illustrated Guide to Arizona Weeds."**

Bromus rubens L. ----- Red brome  
Bromus tectorum L. ----- Cheatgrass or Downey brome  
Centaurea solstitialis L. ----- Yellow starthistle