Job Task Analysis

Employer: Stanislaus County

Occupation: Agricultural Assistant

Classification: I, II

Company Contact: Risk Management

1010 10th Street

Modesto, California 95354

(209) 525-5770

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Analysis Provided By: Lyle Andersen, PT, CWCE

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INTRODUCTION:

A complete job description is available through Stanislaus County Human Resources. The environmental factors, physical and functional demands for this Job Task Analysis were documented by Andersen Physical Therapy, Inc. The methodology for documentation consisted of on-site visits, using various measuring devices such as dynamometers and scales, as well as observation and interviews with employees and managers. A detailed record was made of the physical and functional demands of the job in terms of force pounds, weight, frequency, height, distance, anthropometric measurements, stamina, and degrees of range of motion. The determination of the frequencies of functional activities is based on standards provided by the National Institute for Occupational Safety and Health (NIOSH) and the Work Practice Guide for Manual Lifting (U.S. Department of Commerce, National Technical Information Service).

The Job Task Analysis is organized as follows: General work description; safety requirements; equipment; environmental factors; and physical/functional demands.

GENERAL WORK DESCRIPTION:

The frequency of the following activities may vary according to the physical requirements of the specific job tasks that the employee may be required to perform at random intervals.

Under the general supervision of the department manager, the Agricultural Assistant I, II assists agricultural inspectors in performing inspection activities, survey and control activities and performs a wide variety of semi-skilled field tasks in pest control, pest detection and performs related duties as required.

SPECIFIC DUTIES: Available through the Human Resources Department at the County of Stanislaus.

https://www.governmentjobs.com/careers/stanislaus/classspecs

<u>Safety Requirements</u>: All employees are required to observe company safety procedures and standards to insure individual and collective safety, in addition to avoiding unnecessary risk to oneself, co-workers, customers, and property.

Equipment:

- 1. Computer
- 2. Copy machine
- 3. Eye dropper, funnel
- 4. Insect detection traps
- 5. Lab equipment
- 6. Magnifying glass
- 7. Microscope

- 8. Office equipment
- 9. Pole (trap placement)
- 10. Step stool
- 11. Telephone
- 12. Tweezer
- 13. Vehicle
- 14. Wire cutter/needle nose pliers

All employees within the **Agricultural Assistant I, II** position are required to provide physical assistance for all weight and frequency requirement needs of all job tasks in order to maintain a safe work environment. Employees must be physically capable of working in any of the job tasks within the **Agricultural Assistant I, II** position.

ENVIRONMENTAL FACTORS

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The following percentages are given in terms of an eight-hour workday:

 Seldom =
 1% - 2%
 Frequent =
 34% - 66%

 Occasional =
 3% - 33%
 Constant =
 67% - 100%

	ENVIRONMENTAL FACTORS	MAXIMUM FREQUENCY
1.	Unprotected heights: 8-foot ladder, step stool	Seldom
2.	Being around moving machinery:	Occasional
3.	Exposure to marked changes in temperature and humidity: outside temperatures may seasonally vary between 28-110 degrees.	Occasional
4.	Exposure to dust, fumes, smoke, gases, or other irritating substances (specify):	Seldom
5.	Driving: Vehicle	Frequent
6.	Exposure to excessive noise:	Not Applicable
7.	Exposure to radiant or electrical energy:	Not Applicable
8.	Exposure to solvents or chemicals: **Refer to MSDS document.**	Not Applicable
9.	Exposure to slippery or uneven walking surfaces:	Frequent
10.	Working below ground:	Not Applicable
11.	Unusual fatigue factors:	Not Applicable
12.	Working with explosives:	Not Applicable
13.	Excessive vibration:	Not Applicable
14.	Working with hands in water or other substance: Hand protection is available	Seldom
15.	Working proximity:	Constant Constant
16.	Working inside:	Occasional
17.	Working outside:	Constant

FUNCTIONAL ACTIVITIES



The frequency of the following activities may vary according to the physical requirements of the specific job tasks the employee may be required to perform at random intervals.

PHYSICAL AND FUNCTIONAL REQUIREMENTS

FREQUENCY DEFINITIONS	<u>SELDOM</u>	OCCASIONAL	<u>FREQUENT</u>	CONSTANT
Percent of the Day	1-2%	3-33%	34-66%	67-100%
Material Handling	1-4 Reps	5-32 Reps	33-250 Reps	251-2,000 Reps
Non Material Handling	1-4 Reps	5-32 Reps	33-250 Reps	251-2,000 Reps
Repetitive & Static Work	1-50 Reps	51-250 Reps	251-1,000 Reps	1,001-20,000 Reps

1.) PUSH: Pushing activities may require use of the back in conjunction with leg and arm musculature.

MAXIMUM REQUIREMENT

0-10 pounds: Occasional **11-25 pounds:** Occasional

26-100 pounds: Not Required **Maximum Force: 25** Pounds

Assistive Devices: 4-Wheel Cart, Hand Truck. Additionally, one person's assistance is available with forces greater than 25 pounds.

Comments: Pushing is utilized with activities such as retrieving, returning, storing, adjusting, moving, and/or transporting equipment and supplies (e.g. bait, desk drawer, file). The employee exerts up to 25 pounds of force in a horizontal plane from waist to shoulder height of a distance up to 200 feet when performing job tasks (e.g. cart or hand truck containing up to 50-pound bag of rodent bait; close door drawer and file; rearrange potted plants).

2.) PULL: Pulling activities may require use of the back in conjunction with leg and arm musculature.

MAXIMUM REQUIREMENT

0-10 pounds: Occasional **11-25 pounds:** Occasional

26-100 pounds: Not Required **Maximum Force: 25** Pounds

Assistive Devices: 4-Wheel Cart, Hand Truck. Additionally, one or more person(s) assistance is available with forces greater than 25 pounds.

Comments: Pulling is utilized with activities such as retrieving, returning, storing, adjusting, moving and/or transporting, equipment, controls, and supplies (e.g. drawer, file). The employee exerts up to 25 pounds of force in a horizontal plane between waist and shoulder height of a distance up to 2 feet when performing job tasks (e.g. up to 25 pounds of force to open door/desk drawer, file; rearrange potted plants). *Pushing is the preferred method of moving carts.*

3.) STAND-UP LIFT: Lifting weighted objects between floor and waist height.

MAXIMUM REQUIREMENT

0-10 pounds: Frequent
11-25 pounds: Occasional
26-35 pounds: Occasional
36-50 pounds: Seldom

51-100 pounds: Not Required **Maximum Force:** <u>**50**</u> Pounds

Assistive Devices: One or more person(s) assistance is available with weights greater than 50 pounds.

Comments: A stand-up lift is utilized with activities such as retrieving, returning, storing, adjusting, moving and/or transporting, equipment, controls, and supplies (e.g. bag, box, paper, trap, plant).

The employee lifts items weighing between <1 pound and 50 pounds from/to the floor when performing job tasks (e.g. 3-ring binder, up to 40-pound box of storage files; up to 50-pound potted plant; up to 10+-pound insect trap; up to 16-pound drinking water jug). Safe lifting is performed by utilizing a posture of partial squatting and a straight back.

4.) <u>LEVEL LIFT</u>: Lifting weighted objects from between waist and chest height level for a maximum horizontal distance of up to four feet.

MAXIMUM REQUIREMENT

0-10 pounds: Frequent11-25 pounds: Occasional26-35 pounds: Occasional36-50 pounds: Seldom

51-100 pounds: Not Required **Maximum Force:** <u>**50**</u> Pounds

Assistive Devices: Forklift, 4-Wheel Cart, Hand Truck. Additionally, one or more person(s) assistance is available with weights greater than 50 pounds.

Comments: A level lift is utilized with activities such as retrieving, returning, storing, adjusting, moving and/or transporting, equipment, controls, and supplies (e.g. bag, box, trap, plant, paper). The employee lifts items weighing between <1 pound and 50 pounds when performing job tasks (e.g. up to 40-pound beehive box; 3-ring binder, up to 40-pound box of storage files; up to 50-pound potted plant; up to 10+-pound insect trap; up to 16-pound drinking water jug).

5.) WEIGHT CARRY: Carrying weighted objects between waist and chest height beyond a distance of four feet.

MAXIMUM REQUIREMENT

0-10 pounds: Frequent **11-25 pounds:** Seldom

26-100 pounds: Not Required **Maximum Force: 25** Pounds

Assistive Devices: Forklift, 4-Wheel Cart, Hand Truck.

Additionally, one or more person(s) assistance is available with weights greater than 25 pounds.

Comments: Weight Carry is utilized with activities such as retrieving, returning, storing, adjusting, moving and/or transporting, equipment, controls, and supplies (e.g. bag, trap, plant, paper).

The employee carries items weighing between <1 pound and 25 pounds between 5 feet and 100+ feet when performing job tasks (e.g. 3-ring binder; up to 10+-pound insect trap; up to 16-pounds drinking water jug).

6.) OVERHEAD LIFT/PULL DOWN: Lifting weighted object from/to chest and overhead height level.

MAXIMUM REQUIREMENT

0-10 pounds: Occasional

11-100 pounds: Not Required Maximum Force: 10 Pounds

Assistive Devices: A vertical ladder, step ladder or step stool is available to bring items to eye or shoulder level.

Additionally, one or more person(s) assistance is available with weights greater than 10 pounds.

Comments: Overhead lift/pull down is utilized with activities such as retrieving, returning, storing, adjusting, moving and/or transporting, equipment, controls, and supplies (e.g. trap, plant). The employee lifts items weighing between <1 pound and 10 pounds to a maximum height of 72 inches when performing job tasks (e.g. up to 10+-pound insect detection trap; up to 5+-pound potted plant). Variables to overhead reaching will be the employee's height and anthropometric reach.

7.) **OVERHEAD REACH:**

MAXIMUM

FREQUENCY: Occasional

Comments: Overhead reach is performed to a maximum height of 72 inches when retrieving, returning, storing, adjusting, moving and/or transporting, equipment, controls, and supplies (e.g. place/remove insect detection trap; examine and inspect potted plant). A ladder (appropriate height) or step stool may be utilized to bring items to eye or

shoulder level. Variables to overhead reaching will be the employee's height and anthropometric reach.

8.) FORWARD REACH:

MAXIMUM FREQUENCY: Frequent

Comments: Forward reach is performed up to a distance of 28 inches when manipulating, handling, retrieving, returning, storing, adjusting, moving and/or transporting, equipment, controls, and supplies (e.g. place/remove insect detection trap; examine and inspect potted plant; desktop work; drive vehicle). The degree of elbow extension required for reaching will vary according to the employee's anthropometric reach.

9.) **STOOP**:

MAXIMUM FREQUENCY: Occasional

Stooping is performed when retrieving, returning, storing, adjusting, moving and/or transporting, equipment, controls, and supplies (e.g. place/remove insect detection trap; examine and inspect potted plant). Variable to stooping will be the employee's height. Stooping of the head, trunk and knees can be minimized or avoided by substituting alternate positions of squatting, kneeling or bending when performing job tasks.

10.) **SOUAT**: (Unloaded)

MAXIMUM

FREQUENCY: Not Required

Comments: Squatting is not required to perform job tasks.

Squatting may be minimized or avoided by substituting alternate positions of bending, kneeling or half kneeling. Partial squatting is a preferred lifting posture.

11.) **FORWARD BEND**:

MAXIMUM FREQUENCY: Frequent

Comments: Bending forward at the waist is performed when retrieving, returning, storing, adjusting, moving and/or transporting, equipment, controls, and supplies (e.g. place/remove detection trap; potted plant). Maximum forward trunk flexion required is 60 degrees. Employee may minimize or avoid excessive forward bending of the trunk up to 80 degrees by using alternate positions of bending at the hips, kneeling, half kneeling, stooping, sitting or squatting.

12.) **TWIST**:

MAXIMUM

FREQUENCY: Occasional

Comments: Twisting at the waist is performed when retrieving, returning, storing, adjusting, moving and/or transporting, equipment, controls, and supplies (e.g. place/remove insect detection traps; potted plants; insect trap; surveillance; worksite inspection; drive vehicle). Twisting at the waist may be minimized by turning the whole body, including the feet and working from a swivel office chair.

13.) **TURN**:

MAXIMUM FREQUENCY: Occasional

Comments: Turning is performed when retrieving, returning, storing, adjusting, moving and/or transporting, equipment, controls, and supplies (e.g. place/remove insect detection traps; potted plants; insect trap; surveillance; worksite inspection).

14.) **KNEEL:**

MAXIMUM

FREQUENCY: Not Required

Comments: Kneeling is not required to perform job tasks. *Kneeling may be minimized or avoided by substituting alternate positions of bending, sitting, squatting, or half kneeling.*

15.) **CRAWL**:

MAXIMUM

FREQUENCY: Not Required

Comments: Crawling is not required to perform job tasks.

16.) **STAIR CLIMB**:

MAXIMUM

FREQUENCY: Not Required

Comments: Stair climb is not required to perform job tasks.

17.) **LADDER CLIMB**:

MAXIMUM

FREQUENCY: Seldom

Comments: Ladder climbing is required to perform job tasks (e.g. step stool, 8-foot ladder). Variables to overhead climbing will vary according to the employee's height and anthropometric reach.

18.) **WALK**:

MAXIMUM

FREQUENCY: Frequent

Comments: Walking is performed when retrieving, returning, storing, moving and/or transporting, equipment and/or supplies (e.g. to/from insect detection sites and plant inspection sites plant; surveillance; worksite inspection). Walking length varies between 3 feet and 600+ feet depending on job task.

19.) **SIT**:

MAXIMUM FREQUENCY: Frequent

Comments: Sitting is performed for a maximum of 45-minute intervals when performing job tasks (e.g. drive to/from insect detection trap and plant inspection site; desktop work).

20.) **STAND**: (Static)

MAXIMUM FREQUENCY: Occasional

Comments: Static standing is performed for a maximum of up to 15-minute intervals when performing job tasks (e.g. stand to handle bait traps in laboratory; setting trap; potted plant inspection; surveillance; worksite inspection).

21.) **BALANCE**:

MAXIMUM FREQUENCY: Frequent

Comments: Adequate balance is required for safe walking, standing, climbing, reaching and lifting.

22.) **HAND/FOOT CONTROL**:

MAXIMUM REQUIREMENT

HAND:

Right: Frequent
Left: Frequent
Both: Occasional
Either: Not Required

FOOT:

Right: Frequent
Left: Seldom
Both: Not Required
Either: Not Required

Comments: Hand controls are utilized to operate equipment (e.g. vehicle) when adjusting, equipment (e.g. drive vehicle).

Foot controls are utilized to operate equipment (e.g. drive vehicle).

23.) UPPER AND LOWER EXTREMITY COORDINATION:

MAXIMUM REQUIREMENT

Simple Grasp: Frequent
Firm Grasp: Occasional
Fine Manipulation: Occasional
Eye/Hand Coordination: Frequent
Hand/Foot Coordination: Frequent

Comments: Grasping and coordination activities are performed when retrieving, returning, storing, adjusting, moving and/or transporting, equipment, controls, and supplies (e.g. vehicle, insect trap, potted plant, office work).

Simple grasping is utilized to perform job tasks (e.g. lift and manipulate objects weighing less than 5 pounds; drive vehicle; desktop work).

Firm grasping is utilized to perform job tasks (e.g. lift and handle objects weighing 5 pounds or greater; handle trap extension pole; beetle rod placement; twist or cut wire; drive vehicle).

Fine manipulation is utilized to perform job tasks (e.g. keyboard, handwrite, page turn, sort, file, detection trap assembly).

Eye/hand coordination is utilized to perform job tasks (e.g. keyboard, handwrite, page turn, sort, file, detection trap assembly; drive vehicle).

Hand/foot coordination is utilized to perform job tasks (e.g. drive vehicle).

Depending on individual hand dominance, one hand may be used more frequently than the other when performing job tasks.

24.) CERVICAL (NECK) MOVEMENT:

MAXIMUM REQUIREMENT

Static Neutral Position: Frequent
Flexing: Frequent
Rotating: Occasional
Extending: Occasional

Comments: Neck movement is required when performing job tasks (e.g. insect and trap detection, potted plant inspection; drive vehicle; desktop work).

Participation in the observation of the work environment allows for safe working conditions. Full cervical range of motion is required to safely perform the job tasks.



Stanislaus County

JOB TASK ANALYSIS SUMMARY

FREQUENCY DEFINITIONS	SELDOM	OCCASIONAL	FREQUENT	CONSTANT
Percent of the Day	1-2%	3-33%	34-66%	67-100%
Material Handling	1-4 Reps	5-32 Reps	33-250 Reps	251-2,000 Reps
Non Material Handling	1-4 Reps	5-32 Reps	33-250 Reps	251-2,000 Reps
Repetitive & Static Work	1-50 Reps	51-250 Reps	251-1,000 Reps	1,001-20,000 Reps

The following is a summary of the physical demands of the Job Task Analysis that were obtained for the position of:

Agricultural Assistant I, II

Functional Activities	Maximum Requirements	Functional Activities	Maximum Requirements
Push (Force) ¹	25 pounds	Stair Climb	Not Required
Pull (Force) ¹	25 pounds	Ladder Climb ¹	Seldom
Stand Up Lift ¹	50 pounds	$Walk^1$	Frequent
Level Lift ¹	50 pounds	Sit ¹	Frequent
Weight Carry ¹	25 pounds	Stand (Static) ¹	Occasional
Overhead Lift/Pull Down	10 pounds	Balance ¹	Frequent
Overhead Reach ¹	Frequent	Hand Control ¹	Frequent
Forward Reach ¹	Occasional	Foot Control ¹	Frequent
Stoop ¹	Occasional	Simple Grasp ¹	Frequent
Squat (Unloaded)	Not Required	Firm Grasp ¹	Occasional
Forward Bend ¹	Frequent	Fine Manipulation ¹	Occasional
Twist ¹	Occasional	Eye/Hand Coordination ¹	Frequent
Turn ¹	Occasional	Hand/Foot Coordination ¹	Frequent
Kneel	Not Required	Cervical (neck) Movement ¹	Frequent
Crawl	Not Required		

¹ The critical demands of the job.

Lyle andersen,	PT		
	Date:		Date:
Lyle Andersen, PT, CWCE Preparer Signature		Contact Person Title	
Irina Lagin	Date: 5/31/22	Ag. Assistant 11	Date: 5/31/22
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LA/gm